

GenCore version 5.1.6
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CM protein - nucleic search, using frame_plus_p2n model

Run on: May 5, 2004, 13:34:52 ; Search time 115 Seconds
(without alignments)
2509.343 Million cell updates/sec

Title: US-09-623-514A-2

Perfect score: 2771
Sequence: 1 MAILDSAGVTVTGCGEF.....OPMCVLLYYHLMKRGKMS 520

Scoring table:

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Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 13554:8

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued Patents NA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2771	100.0	1942	US-09-326-203A-1	Sequence 1, Appli
2	2309.5	83.3	1512	US-09-593-359-3	Sequence 3, Appli
3	1833	66.1	1446	US-09-593-359-1	Sequence 1, Appli
4	794	28.7	1976	US-09-165-042-2	Sequence 2, Appli
5	773.5	27.9	1650	US-09-103-754A-2	Sequence 2, Appli
6	773.5	27.9	1766	US-09-326-203A-15	Sequence 15, Appli
7	773.5	27.9	1766	US-09-326-203A-16	Sequence 16, Appli
8	709.5	25.6	1895	US-09-326-203A-14	Sequence 14, Appli
9	652.5	23.5	629	US-09-103-754A-3	Sequence 3, Appli
10	412.5	14.9	4011	US-08-121-057-3	Sequence 3, Appli
11	412.5	14.9	4011	US-08-509-187D-3	Sequence 3, Appli
12	412.5	14.9	4011	US-09-121-396-3	Sequence 3, Appli

13	412.5	14.9	4011	5	PCT-US93-09704A-3	Sequence 3, Appli
14	405.5	14.6	4079	1	US-08-121-057-2	Sequence 2, Appli
15	405.5	14.6	4079	2	US-08-509-187D-2	Sequence 2, Appli
16	405.5	14.6	4079	2	US-09-121-396-2	Sequence 2, Appli
17	405.5	14.6	4079	5	PCT-US93-09704A-2	Sequence 2, Appli
18	375	13.5	1607	4	US-09-328-857A-1	Sequence 2, Appli
19	364.5	13.2	1509	4	US-09-328-857A-2	Sequence 2, Appli
20	364	13.1	2040	3	US-09-165-042-4	Sequence 4, Appli
21	299	10.8	275	4	US-09-326-203A-5	Sequence 5, Appli
22	284.5	10.3	253	4	US-09-326-203A-7	Sequence 7, Appli
23	284	10.2	234	4	US-09-326-203A-3	Sequence 3, Appli
24	277	10.0	267	4	US-09-326-203A-4	Sequence 4, Appli
25	275	9.9	254	4	US-09-326-203A-8	Sequence 8, Appli
26	275	9.9	254	4	US-09-313-294A-583	Sequence 80, App
27	266	9.6	262	4	US-09-326-203A-9	Sequence 9, Appli
28	266	9.6	262	4	US-09-313-294A-1562	Sequence 1662, Ap
29	224.5	8.1	518	4	US-09-326-203A-12	Sequence 12, Appl
30	187.5	6.8	519	4	US-09-326-203A-11	Sequence 11, Appl
31	166.5	6.0	325	4	US-09-326-203A-10	Sequence 10, Appl
32	151	5.4	996	1	US-08-121-057-1	Sequence 1, Appli
33	151	5.4	996	2	US-08-509-187D-1	Sequence 1, Appli
34	151	5.4	996	2	US-09-121-396-1	Sequence 1, Appli
35	151	5.4	996	5	PCT-US93-09704A-1	Sequence 1, Appli
36	150	5.4	6755	3	US-08-931-999-4	Sequence 4, Appli
37	144	5.2	1239	4	US-09-134-001C-2048	Sequence 2048, Ap
38	142.5	5.1	3967	4	US-09-672-743-14	Sequence 14, Appl
39	141.5	5.1	92407	4	US-09-596-002-36	Sequence 36, Appl
40	132.5	4.8	1500	4	US-09-540-236-1237	Sequence 1297, Ap
41	130	4.7	1218	4	US-09-134-000C-2067	Sequence 2067, Ap
42	122.5	4.4	1230025	4	US-09-198-452A-1	Sequence 1, Appli
43	120	4.3	3707	1	US-08-118-101A-1	Sequence 1, Appli
44	117	4.2	7557	1	US-08-464-136-4	Sequence 4, Appli
45	117	4.2	7557	2	US-08-349-131-4	Sequence 4, Appli

ALIGNMENTS

RESULT 1
US-09-326-203A-1
; Sequence 1, Application US/09326203A
; Patent No. 644876
; GENERAL INFORMATION:
; APPLICANT: Lasser, Mike
; APPLICANT: Ruzinsky, Diane
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; FILE OF INVENTION: Acid Sequences
; FILE REFERENCE: 17045/00/WO
; CURRENT APPLICATION NUMBER: US/09/326,203A
; CURRENT FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/109,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1942
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-326-203A-1

Alignment Scores:
Pred. No.: 4.71e-296 Length: 1942
Score: 2771.00 Matches: 520
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 4 Gaps: 0

US-09-623-514A-2 (1-520) x US-09-326-203A-1 (1-1942)

Qy 1 MetAlaileLeuAspSerAlaGlyValThrValThrGluAsnGlyGlyGluPhe 20
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102e1


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Qy 80 AspAsnAspGlyGlyGlyAspAsnAsnGlyGlyGlyArgGlyGlyGlyGlyGly 99
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Qy 100 AsnAlaAspAlaThrPheThrThrArgProSerValProAlaHisArgArgAlaArgGlu 119
Db 253 -----GATGAAAGCTTCACGTCACCGCTCGGTTCAGCTCACCAGGAGCAGGAG 306
Qy 120 SerProLeuSerSerAspAlaIlePheLysGlnSerHisAlaGlyLeuPheAsnLeuCys 139
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Qy 140 ValValValLeuLeuAlaValAsnSerArgLeuLeuLeuLeuLeuLeuLeuLeuGly 159
Db 367 GTAGTTGTTCTGTTGCTGTTAAACAGTAGACTCATCATCGAAACCTCATGAAGTATGT 426
Qy 160 TrpLeuIleArgThrAspPheThrPheSerSerArgSerLeuArgAspTrpProLeuPhe 179
Db 427 TGGTTGATCAGAACTGATTTTGGTTTGTAGTTCTACATCTTTACGAGACTGCGCGCTTTC 486
Qy 180 MetCysCysIleSerLeuSerIlePheProLeuAlaAlaPheThrValGluLysLeuVal 199
Db 487 ATGTGTGCTTTTACCTTCGCTCTTCTTGGTGTGCTTTCACCGTTCGAGAAATGTGA 546
Qy 200 LeuGlnLysIleSerGluProValValIlePheLeuHisIleIleIleThrMetThr 219
Db 547 CTTCAGAAATTCATATCTGAGCCTGTCGCATCATCTTCATGTCATTATTAACCAAGACA 606
Qy 220 GluValLeuIleValThrValThrLeuArgCysAspSerAlaPheLeuSerGlyVal 239
Db 607 GAGGTCTTGTATCCAGCTACGTCACAGTGTGATTCGCTCTCTTGTGACGGTGTTC 666
Qy 240 ThrLeuMetLeuLeuThrCysIleValTrpLeuLysLeuValSerTyrAlaHisThrSer 259
Db 667 ACGTTGAGCTGTGCTACCTGCAATGTTGGCTGGAAGTTGGTTTCTACGCTGTTACTAGC 726
Qy 260 TyrAspIleArgSerLeuAlaAsnAlaAlaAspLysAlaAsnProGluValSerTyrTyr 279
Db 727 TACGACATAAGAACCTCGCCAAATTCAGCTGATAGGTCGATCTCGAAATCTCTACTAT 786
Qy 280 ValSerLeuLysSerLeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnProSer 299
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Qy 300 TyrProArgSerAlaCysIleArgCysGlyTrpValAlaArgGlnPheAlaLysLeuVal 319
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Qy 320 IlePheThrGlyPheMetGlyPheIleIleGluGlnIleIleAsnProIleValArgAsn 339
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Qy 340 SerLysHisProLeuLysGlyAspLeuLeuTyrAlaIleGluArgValLeuLysLeuSer 359
Db 967 TCAGAGCATCTCTGAAAGGGGACCTTCTATATGCTATATGAAGAGTGTGAAGCTTTCA 1026
Qy 360 ValProAsnLeuTyrValTrpLeuCysMetPheTyrCysPhePheHisLeuTrpLeuAsn 379
Db 1027 GTTCCAAATCTATATGTGGCTTCGATGTTCTACTGCTTCTTCCACCTTTGGTTAAAC 1086
Qy 380 IleLeuAlaGluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTrpTrpAsnAla 399
Db 1087 ATATTGGCAGAGCTCTCTGCTTCTGGGAGCCGTGAATTTCTACAAAGATTGGTGAATGCA 1146
Qy 400 LysSerValGlyAspTyrTrpArgMetTrpAsnMetProValHisLysTrpMetValArg 419
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Qy 440 PheLeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheLys 459
Db 1267 TTCTTAGTCTCTGAGTCTTTTCATGAGTTATGATCGCAGTTCCTTGGCGTCTCTTCAAT 1326
Qy 460 LeuTrpAlaPheLeuGlyIleMetPheGlnValProLeuValPheIleThrAsnTyrLeu 479
Db 1327 CTATCGGCTTTCATGGGAATTATGTTTCAGGTCCCTTTCGTTCTTATCAAACTTTTA 1386
Qy 480 GlnGluArgPheGlySerThrValGlyAsnMetIlePheTrpPheIlePheCysIlePhe 499
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Qy 520 Ser 520
Db 1507 TCC 1509
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RESULT 3

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US-09-593-359-1
; Sequence 1, Application US/09593359
; Patent No. 6552250
; GENERAL INFORMATION:
; APPLICANT: Laroche, Andre J.
; APPLICANT: Nykiforuk, Cory L.
; APPLICANT: Weselake, Randall J.
; TITLE OF INVENTION: Diacylglycerol O-acyltransferase
; FILE REFERENCE: 24015050
; CURRENT APPLICATION NUMBER: US/09/593,359
; CURRENT FILING DATE: 2000-06-14
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1446
; TYPE: DNA
; ORGANISM: Brassica napus
; FEATURE:
; OTHER INFORMATION: DGAT2
; NAME/KEY: CDS
; LOCATION: (82)..(1107)
US-09-593-359-1
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Alignment Scores:

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Best Local Similarity:	92.93%	Mismatches:	16
Query Match:	66.15%	Indels:	1
DB:	4	Gaps:	0

US-09-623-514A-2 (1-520) x US-09-593-359-1 (1-1446)

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Qy 173 LeuArgAspTrpProLeuPheMetCysCysIleSerLeuSerIlePheProLeuAlaAla 192
Db 62 CTGCAGAGATG-CCGCTTTTCATGTTGTCTCTCCCTTCAATCTTCTTGGCTGCC 120
Qy 193 PheThrValGluLysLeuValLeuGlnLysTyrIleSerGluProValValIlePheLeu 212
Db 121 TTTACCGTCGAGAAATAGTACTTCAAGAAATCAATATCTGAACCTGTTGTCATCTTCT 180
Qy 213 HisIleIleIleThrMetThrGluValLeuTyrProValTyrValThrLeuArgCysAsp 232
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Qy	268	aaIaAspLysAlaAsnPro-----GluValSerTyr-----TyrValSer	281
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Qy	281	rLeuSerSerLeuAlaTyrPheMetValAlaIaProThrLeuCysTyrSlnProSerTyrPr	301
Db	988	CTACCGCGGATCTCTACTACTCTCTCTGCGCCCACTGTGTCTAGSAGCTCAACTTCC	1047
Qy	301	oArgSerAlaCysIleAargLysGlyTrpValAlaAargGlnPheAlaLysLeuValIlePh	321
Db	1048	CCGCTCTCCCGCATCTCGGAAGCGCTTCTGCTGCGACGATCCTTGAGATGCTGTCTT	1107
Qy	321	eThrGlyPheMetGlyPheIleIleGluGlnTyrIleAsnProIleValAargAsnSerLys	341
Db	1108	CACCGAGCTCCAGTGGGCGTGAATCAGCAGTGGATGGTCCCAACCATCCAGAACTCCAT	1167
Qy	341	shISProLeuLysGlyAspLeuLeuTyrAla-----IleGluAargValLeuLysIleuSer	359
Db	1168	GAAGCGCTTCAAG--GACATGGACTACTCACGCATCATCGAGCGCTCTCGAAGCTGGC	1224
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Qy	379	nIleLeuAlaGluLeuLeuCysPheGlyAspAargGluPheTyrLysAspTrpTrpAsnAl	399
Db	1285	TGCGTGGCTGAGCTCATGCGATTTGGAGACCGGGAGTCTACCGGAGCTGGTGGAACTC	1344
Qy	399	alYSerValGlyAspTyrTrpAargMetTrpAsnMetProValHisLysTrpMetValAr	419
Db	1345	CGAGTCTGTCACTTCTGGCAGAACTCGAACATCCCTGTGCACAAAGTGTGCATCAG	1404
Qy	419	gHisIleTyrPheProCysLeuAargSerLysIleProLysThrLeuAlaIleIleAl	439
Db	1405	ACACTTCTACAGCCCATGCTTCACCGGGCAGCAGCAAGTGGATGCCAGCAGGCGGT	1464
Qy	439	apheLeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheTy	459
Db	1465	GTTCCTGGCTCGCTTTCCTCCACGAGTACCTGTGTGAGCGTCCCTCTCGAATGTTCG	1524
Qy	459	sLeuTrpAlaPheLeuGlyIleMetPheGlnValProLeuVal---PheIleThrAsnTy	478
Db	1525	CCCTCTGGCGTTTTCACGGGCAGATGGCTCAGATCCCACTGGCTGGTTCGTGGCGCGCTT	1584
Qy	478	rLeuGlnGluAargPheGlySerThrValGlyIAsnMetIlePheTrpPheIlePheCysIl	498
Db	1585	TTTCCAGGGCAACTAT-----GGCAAGCGAGCTGTGG---CTGTGCTCAT	1629
Qy	498	ePheGlyGlnProMetCysValLeuLeuTyrTyrHisAsp	511
Db	1630	CATCGCACGCCAATAGCGTCTCTCATGTACGTCCAGCAG	1669

RESULT 5

US-C9-103-754A-2
; Sequence 2, Application US/39103754A
; Patent No. 6344548
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert
; APPLICANT: Cases, Sylvaine
; APPLICANT: Smith, Steven
; APPLICANT: Erickson, Sandra
; TITLE OF INVENTION: Diacylglycerol O-acyltran
; TITLE OF INVENTION: sferase
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed
; STREET: 285 Hamilton Avenue, Suite 200

Db 423 GCAAGGTTATTTTACAGAACCTTATCAAGTATGTCATCTCGTG---GATCTATCCAG 479
 Qy 168 PheSerArgSerLeuArgAsp-----TrpProLeuPheMetCysIleSer 184
 Db 480 GTGGTGCTCTCTTTTGAAGGACCCCTACAGCTGGCTGCCCTGATGATGATGCA 539
 Qy 185 LeuSerIlePheProLeuAlaPheThrValGluLeuValLeuGlnIleGlyTyrIle 204
 Db 540 TCCATATTTTGTGGCTGATTCAGATTGAGAGCGCTGCGCATGGGTCCTG 599
 Qy 205 SerGluProValValIlePheLeuHisIleIleThrMetThrGluValLeuTyrPro 224
 Db 600 ACAGAGCAGATGGGCTGCTGATCATGTGGTTACCTGGCCACATCATTTGCTTCCA 659
 Qy 225 ValTyrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThrLeuMetLeu 244
 Db 660 GCAGCTGTGGCTTACTGTGTGAGCTATCACTCCAGTGGTTCCTGTTGCTGCGCA 719
 Qy 245 Thr---CysIleValTrpLeuIleValSerTyrAlaHisThrSerTyrAspIleArg 263
 Db 720 TCATATCCATCATGTTCTCAAGCTTTATTCCTACCGGATGTCAACCTGTGGTCCGC 779
 Qy 264 -----SerLeuAlaAsnAlaAlaAsp 270
 Db 780 CAGCGAAGGCTCAGGCCAAGCTCTCTACAGGGAAGAGTCACTGCGGGCTGCT--- 836
 Qy 271 LysAlaAsnProGluValSerTyr-----TyrValSerLeuIleSerLeuAlaTyrPhe 288
 Db 837 ---GCCAGCAGCTGTGAGCTATCCAGACAACTGACCTACCGAGATCTCTATTACTTC 893
 Qy 289 MetValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAlaCysIleArgLys 308
 Db 894 ATCTTTGCTCCCTACITTTGTTATGATCACTCACTCTCGGTCCTCCGCAATACGAA 953
 Qy 309 GlyTrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMetGlyPheIle 328
 Db 954 CGCTTTCTGCTAGCAGAGTCTTGAGATGCTCTTTTATCCAGCTTCAAGTGGGGCTG 1013
 Qy 329 IleGluGlnTyrIleAsnProIleValArgAsnSerIleHisProLeuIleGlyAspLeu 348
 Db 1014 ATCCAAACAGTGTGCTCTACTATCCACAACTCCATCAAGCCCTTCAAG---GATATG 1070
 Qy 349 LeuTyrAla-----IleGluArgValLeuLysLeuSerValProAsnLeuTyrValTrp 366
 Db 1071 GACTATTACCGATCATGAGGCTCTCTTAAGCTGGGCTCCCAACCATCTGATCTGG 1130
 Qy 367 LeuCysMetPheTyrCysPhePheHisLeuTrpLeuAsnIleLeuAlaGluLeuCys 386
 Db 1131 CTATCTCTCTTATTTGTTTTCCTACTCTGCTCTCAATGCTGTGGCAGAGCTTCTGCAG 1190
 Qy 387 PheGlyAspArgGluPheTyrIleAspTrpTrpAsnAlaIleSerValGlyAspTyrTrp 406
 Db 1191 TTTGGAGACCGCGAGTTCTACAGAGATTGGTGGATGCTGAGTCTCTCACTTCTTGG 1250
 Qy 407 ArgMetTrpAsnMetProValHisLysTrpMetValArgHisIleTyrPheProCysLeu 426
 Db 1251 CAGAACTGGAAATATCCCTGGTGCACAACTGTCATCAGACACTTCTCAAGCCTATGCTC 1310
 Qy 427 ArgSerLysIleProLysThrLeuAlaIleIleAlaPheLeuValSerAlaValPhe 446
 Db 1311 AGACATGGCAGCAGCAATATGGTGGCCAGCAGAGGATGATTTTGTACCTCAGCCTTCTTC 1370
 Qy 447 HisGluLeuCysIleAlaValProCysArgLeuPheLysIleTrpAlaPheLeuGlyIle 466
 Db 1371 CATGAGTACATAGTACGCTTCCCTCGGATGTTCCGCTCTGCGCATTCACAGCCATG 1430
 Qy 467 MetPheGlnValProLeuValPheIleThrAsnTyrLeuGlnIleArgPheGlySerThr 486
 Db 1431 ATGGCTCAGGCTCCATGGCTGGATTTGGGCGCGATTC-----TTCCAGGGGAAC 1481
 Qy 487 ValGlyAsnMetIlePheTrpPheIlePheCysIlePheGlyGlnProMetCysValLeu 506
 Db 1482 TATGGCAATGCAGCTGTGTGG---GTGACACTCATCATTTGGGCAACCGGTGGCTGTGCTC 1538

Qy 507 LeuTyrTyrHisAsp 511
 Db 1539 ATGTATGTCACGAC 1553
 RESULT 6
 US-09-326-203A-15
 ; Sequence 15, Application US/09326203A
 ; Patent No. 644876
 ; GENERAL INFORMATION:
 ; APPLICANT: Lasser, Mike
 ; APPLICANT: Ruzinsky, Diane
 ; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
 ; TITLE OF INVENTION: Acid Sequences
 ; FILE REFERENCE: 17045700/NO
 ; CURRENT APPLICATION NUMBER: US/09/326,203A
 ; PRIOR FILING DATE: 1999-06-04
 ; PRIOR APPLICATION NUMBER: 60/088,143
 ; PRIOR FILING DATE: 1998-06-05
 ; PRIOR APPLICATION NUMBER: 60/108,389
 ; PRIOR FILING DATE: 1998-11-12
 ; NUMBER OF SEQ ID NOS: 46
 ; SOFTWARE: Patent In Ver. 2.1
 ; SEQ ID NO 15
 ; LENGTH: 1766
 ; TYPE: DNA
 ; ORGANISM: Rattus sp.
 ; US-09-326-203A-15
 Alignment Scores:
 Pred. No.: 2,7e-75 Length: 1766
 Score: 773.50 Matches: 193
 Percent Similarity: 53.58% Conservative: 84
 Best Local Similarity: 37.33% Mismatches: 171
 Query Match: 27.91% Indels: 69
 DB: 4 Gaps: 17
 US-09-623-514A-2 (1-520) x US-09-326-203A-15 (1-1766)
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 Qy 34 AspSerSerAsnGlyLeuLeuLeuSerGlySerAspAsnAsnSerProSerAspVal 53
 Db 159 GAC-----TTGGCGCGCGGGGTGACGCTCCGCTCCGCT---CCGCTT 200
 Qy 54 GlyAlaProAlaAspValArgAspArgIleAspSerValValAsnAspAspAlaGlnGly 73
 Db 201 CCGGCTCCAGCCACACCGCGGACAAA-----GACCGCAGACC 239
 Qy 74 ThrAlaAsnLeuAlaGlyAspAsnAsnGlyGlyClyAspAsnAsnGlyGlyArgGly 93
 Db 240 AGCGTG-----GCGACGGC 254
 Qy 94 GlyGlyGluGlyArgGlyAsnAlaAspAlaThrPheThrTyrArgProSerValProAla 113
 Db 255 CACTGGAGCTGAGG-----TGC 272
 Qy 114 HisArgArgAlaArgGluSerProLeuSerSerAspAlaIlePheLysGlnSerHisAla 133
 Db 273 CAT---CGTCTGCAACACTCTTTGTTGCTCAGCTCAGACAGCGGTTTC---AGCAATTACCGT 326
 Qy 134 GlyLeuPheAsnLeuCysValValValValLeuIleAlaValAsnSerArgLeuIleGlu 153
 Db 327 GGTATCTCTCAATTTGGTGGCTGTGATGCTGATCTCAGTAATCAAGGTTATTTTAGAG 386
 Qy 154 AsnLeuMetLysTyrGlyTrpLeuIleArgThrAspPheTrpPheSerArgSerIle 173
 Db 387 ATCTTATCAAGTATGGCATCTCTGGG---GATCCCATCCAGGTGGTGTCTCTGTTCTG 443
 Qy 174 ArgAsp-----TrpProLeuPheMetCysIleSerLeuSerIlePheProLeu 190
 Db 174 ArgAsp-----TrpProLeuPheMetCysIleSerLeuSerIlePheProLeu 190


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Db 564 CTGCTACAGTGGTTAACTGCGCCACAAATATCTGCTCCAGCAGCTGTGGCTACTG 523
QY 231 CysAspSerAlaPheLeuSerGlyValThrLeuMetLeuThr---CysIleValTrp 249
Db 624 GTTGGTCTATCACCAGTGGTTCCTGTTGCTGGCATCATCATCTCCATCTTC 683
QY 250 LeuLysLeuValSerTyrAlaHisThrSerTyr-----AspIleArgSer 264
Db 684 CTCAGCTCTTCTCTACCGGATGTCATCTGTGGTCCGCCAGGAAGGGTCAAGGCC 743
QY 265 LeuAlaAsnAlaAlaAspLys-----AlaAsnProGluValSerTyr 278
Db 744 AAAGCTGTGCTGCGAGGAGAGGTCAGTGGGGCTGTGCTGCCAGAACACTGTAGCTAT 803
QY 279 -----TyrValSerLeuLysSerLeuAlaTyrPheMetValAlaProThrLeuCysTyr 296
Db 804 CGGCACAACTGACCTACCGAGATCTCTATTATCTTCATCTTGTCTCTATTGTGTAT 863
QY 297 GlnProSerTyrProArgSerAlaCysIleArgLysGlyTyrValAlaArgGlnPheAla 316
Db 864 GAACCAACTTCTCTCGATCCCGAATACGAAGCGCTTTCTGTACGGGGTTCCT 923
QY 317 LysLeuValIlePheThrGlyPheMetGlyPheIleIleGluGlnTyrIleAsnProIle 336
Db 924 GAGATGCTCTTTTACCCAGCTTCAAGTGGGCTGATCCAGCAGTGGATGGTCCCTACT 983
QY 337 ValArgAsnSerLysHisProLeuLysGlyAspLeuLeuTyrAla-----IleGluArg 354
Db 984 ATCCAGAACTCCATGAAGCCCTTCAAG--GACATGGACTATTTCAGAAATCATTTAGCGT 1040
QY 355 ValLeuLysLeuSerValProAsnLeuTyrValThrLeuCysMetPheTyrCysPhePhe 374
Db 1041 CTTCTAAAGCTGGGGTCCCGAACCACTGATGATGGCTCATCTTCTTATTTGGCTTTTC 1100
QY 375 HisLeuTrpLeuAsnIleLeuAlaGluLeuLysCysPheGlyAspArgGluPheTyrLys 394
Db 1101 CACTCATGTCTCAA TGCTGGCAGAGCTCTCGAGTTTGGAGACCGCAGTCTACAGG 1160
QY 395 AspTrpTrpAsnAlaLysSerValGlyAspTyrTrpArgMetTrpAsnMetProValHis 414
Db 1161 GACTGGTGAATGCTGAGTCTGTACCTACTTTTGGCAGAACTGGAATATCCCGTGCAC 1220
QY 415 LysTrpMetValArgHisIleTyrPheProCysLysLeuArgSerLysIleProLysThrLeu 434
Db 1221 AAGTGGTGTGTCAGACACTTCTACAGCCTATGCTCAGACTGGCGCAGCAAAATGATG 1280
QY 435 AlaIleIleIleAlaPheLeuValSerAlaValPheHisGluLeuCysIleAlaValPro 454
Db 1281 GCCAGGACGTGGGTCTTTTGGCTCAGCCTTCTTCCATGAGTACCTAGTACGATTCCTC 1340
QY 455 CysArgLeuPheLysLeuTrpAlaPheLeuGlyIleMetPheGlnValProLeuValPhe 474
Db 1341 CTGAGGATGTTCCGCTCTGGGCAATTCACAGCCATGATGGCTCAGTCCACTGGCCTGG 1400
QY 475 IleThrAsnTyrLeuGlnGluArgPheGlySerThrValGlyAsnMetIlePheTrpPhe 494
Db 1401 ATGTGTACCGCTTC-----TTCCAGGGAATATGGCAATGCAGCTGTGTGG--- 1448
QY 495 IlePheCysIlePheGlyGlnProMetCysValLeuLeuTyrTyrHisAsp 511
Db 1449 GTGACACTCATATTTGGGCAACGGTGGTGTGCTCATGTATGTCCACGAC 1499
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RESULT 8

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US-09-326-203A-14
; Sequence 14, Application US/09326203A
; Patent No. 6444876
; GENERAL INFORMATION:
; APPLICANT: Lasser, Mike
; APPLICANT: Ruzinsky, Diane
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; TITLE OF INVENTION: Acid Sequences
; FILE REFERENCE: 17045/00/NO
; CURRENT APPLICATION NUMBER: US/09/326,203A
```

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; CURRENT FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 1895
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (209)
; OTHER INFORMATION: n at position 209 is unknown
US-09-326-203A-14

Alignment Scores:
Pred. No.: 3 61e-68 Length: 1895
Score: 709.50 Matches: 160
Percent Similarity: 58.72% Conservative: 69
Best Local Similarity: 41.03% Mismatches: 128
Query Match: 25.60% Indels: 33
DB: 4 Gaps: 12

US-09-623-514A-2 (1-520) x US-09-326-203A-14 (1-1895)
QY 144 IleAlaValAsnSerArgLeuIleIleGluAsnLeuMetLysTyrGlyTrpLeuIleArg 163
Db 234 ATCTTGAGCAATGCCCGTATTTCCTGGAGAACTCATCAAGTATGGCATCTCTGGTG-- 290
QY 164 ThrAspPheTrpPheSerSerArgSerLeuArgAsp-----TrpProLeuPheMet 180
Db 291 GACCCCTCCAGTGGTGTCTCTGTTCTTGAAGATCCCTATAGCTGGCCGCCCATGTC 350
QY 181 CysCysIleSerLeuSerIlePheProLeuAlaAlaPheThrValGluLysLeuValLeu 200
Db 351 CTGTTATTTCGCGCAATGCTTTGCTGTGGTGCATTCAGGTTGAGAAGCGCTGGCG 410
QY 201 GlnLysTyrIleSerGluProValIlePheLeuHisIleIleIleThrMetThrGlu 220
Db 411 GTGGTGGCTTCAGCGAGCGCGGAGCTGCTCTCAGCTGGGCCAACCTGGCCACCAT 470
QY 221 ValLeuTyrProValTyrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThr 240
Db 471 CTGTGTTTCCAGCGCTGTGGTCTTACTGTGTGAGTCTATCACTCAGTGGGCTCCCTG 530
QY 241 LeuMetLeuLeuThr---CysIleValTrpLeuLysLeuValSerTyrAlaHisThrSer 259
Db 531 CTGGCGCTGATGGCGCACACCATCTCTTCTCAAGCTCTTCTCTACCGC----- 581
QY 260 TyrAspIleArgSer-----LeuAlaAsnAlaAlaAspLys 271
Db 582 ---GAGCTCAACTCATGTGGTCCGCGCAGCGCCAGCGCTCCCTCTGAGGAGAGAG 638
QY 272 AlaAsnPro-----GluValSerTyr-----TyrValSerLeuLysSer 284
Db 639 GCCAGCAGTGTGCTGCTCCCGCGACACCGTGAGCTACCCGACAACTGTGACTACCGGAT 698
QY 285 LeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAla 304
Db 699 CTCTACTACTTCTCTTCGCGCCACCTTGTGTAGAGCTCAACTTTCCTCCGCTCTCCC 758
QY 305 CysIleArgLysGlyTrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPhe 324
Db 759 CGCATCCGGAAGCGCTTCTGCTGGCAGCGATCCCTTTCATGATGCTGTCTTTCACCCAGCTC 818
QY 325 MetGlyPheIleIleGluGlnTyrIleAsnProIleValArgAsnSerLysHisProLeu 344
Db 819 CAGTGGGCTGATCCAGCAGTGGATGGTCCCGACCATCCAGAACTCCATGAAGCCCTTC 878
QY 345 LysGlyAspLeuLeuTyrAla-----IleGluArgValLeuLysLeuSerValProAsn 362
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879	AAg---GAGATGGAGTACTCAGCGATCATCGAGGGCTCTCTGAGCTGGCGGTCCCAAT	935
363	LeuTyrvallTrpLeuCysMetPheTyrcysPhePheHisLeuTrpLeuAsnIleLeuAla	382
936	CACCTCATCTGGGCTCATCTCTTCTCACTGGCTCTTCCACTCTCGCTGAATGCGGTGGCT	995
383	GlutLeuLeuCysPheGlyAspArgGluPheTyryAspTrpTrpAsnAlaLysSerVal	402
996	GAGCTCATGTGAGTGTGGAGCCGGAGTTCTACGGGACTGGTGGAACTCCGAGTCTGTC	1055
403	GlyAspTyrrTpArgMetTrpAsrMetProValHisIstysTrpMetValArgHisIleTyrr	422
1056	ACCTACTCTTCGCAGACATCGAAACATCCCTGTGCACAAGGTGTGCATCAGACACTTCTAC	1115
423	PheProCysLeuArgSerIstysIleProlYsthrLeuAlaIleIleIleAlaPheLeuVal	442
1116	AAGCCCCATGTTCTGACGCGGACAGCAAGTGAATGGCCAGGACAGGGGTGTCTTCGGCC	1175
443	SerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheLysLeuTrpAla	462
1176	TCGGCCCTTCTCCACGAGTACCTGGTGAGCGTCCCTCTGCGAATGTTCGCGCTCTGGGCG	1235
463	PheLeuGlyIleMetPheGlnValProLeuVal---PheIleThrAsnTyrrLeuGlnGlu	481
1236	TTCAAGGGCATGATGGCTCAGATCCCACTGGCCTGGTTCGTGGGCGCTTTTTCACAGGC	1295
482	ArgPheGlySerThrValG---YasnMetIlePheTrpPheIlePheCysIlePheGlyGln	501
1296	AACTAT-----GGCAAGCAGCTGTGTGG---CTGTGGCTCATCATCGGACAG	1340
502	ProMetCysValLeuLeuTyrrTyrrHisAsp	511
1341	CCAAATAGCCGTCCTCTCATGTACGTACGTCACGAC	1370

RESULT 9

US-09-103-754A-3
Sequence 3, Application US/09103754A
Patent No. 634454B
GENERAL INFORMATION:
APPLICANT: Farese, Robert
APPLICANT: Cases, Sylvaine
APPLICANT: Smith, Steven
APPLICANT: Erickson, Sandra
TITLE OF INVENTION: Diacylglycerol O-acyltran
TITLE OF INVENTION: sferase
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Read
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/103,754A
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 6510-105p
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650 327 3400
TELEFAX: 650 327 3231
TELEX:

```

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/121,057
; FILING DATE:
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: LAMPORT HAMMITTE, ANN.
; REGISTRATION NUMBER: 34,858
; REFERENCE/DOCKET NUMBER: DCI-033CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-2700
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4011 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1397..3046
; US-08-121-057-3

Alignment Scores:
Pred. No.:      8,56e-35      Length:      4011
Score:          412.50      Matches:      148
Percent Similarity: 42.46%      Conservative: 80
Best Local Similarity: 27.56%      Mismatches: 173
Query Match:      14.89%      Indels:      136
DB:                1         Gaps:        23

US-09-623-514A-2 (1-520) x US-08-121-057-3 (1-4011)

QY 17 GlyGlyGluPheValAspLeuArgArgLysSerArgSerSerSer 36
Db 1604 GGCAGTCACCTTCATGATTTTGTGACCAATCTCATTGAAAGTCAGCATCATAGATAAT 1663
QY 37 AsnGlyLeu-----LeuLeuSerGlySerAspAsnSerProSer 50
Db 1664 GGTGGTGCGCTCTCACACCTTTCTGTTCTTTGAAGGAGAGAAACCAACCATAGAGCG 1723
QY 51 AspAspValGlyAlaProAlaAspValArgAspArgIleAspSerValValAsnAspAsp 70
Db 1724 AGGATTTGAGACCACTTCAGAA-----1747
QY 71 AlaGlnGlyThrAlaAsnLeuAlaGlyAspAsnAsnGlyGlyGlyAspAsnAsnGlyGly 90
Db 1748 ---CAAGGAAGATTTTATT-----1765
QY 91 GlyArgGlyGlyGlyGlyGlyArgGlyAsnAlaAspAlaThrPheThrTyrArgProSer 110
Db 1765 -----1765
QY 111 ValProAlaHisArgArgAlaArgGluSerProLeuSerSerAspAlaIlePheLysGln 130
Db 1766 -----GCAAGCGCTCTCTTTA-----GATGAACCTGCTTGAAGTG 1801
QY 131 SerHis---AlaGlyLeuPheAsnLeuCysValValValLeuIleAla---ValAsnSer 148
Db 1802 GACCACATCAGAACAAATATATCATGTTATTATGCCCTCTCATCTCTTTATCCTCAGC 1861
QY 149 ArgLeuIleIleGlu-AsnLeuMetLysTyrGlyTyrLeuIleArgThrAspPheTrp 168
Db 1862 ACACCTGTAGTATTACATTGATGAAGAGAGCGCTGGTGGTGGT-----1907
QY 168 eSerSerArgSerLeuArg-AspTrpProPheMetCysCysIleSerLeuSer-Ile 187
Db 1908 -TCAGCTCTCTGCTTATGCTTTTGGCAAA-TTCCTACCGTTGTTTGGACCTGGTGATC 1966
QY 188 PheProLeuAlaAlaPheThrValGluLysLeuLeuGlnLysTyr-----203
Db 1967 ATGTTCCTGTCTACATTTTCAGTTCCCTATTTCTCTGTTTCAACATTCGCGCACTGGCTAT 2026

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QY 204 -----IleSerGluProValValIle-----PheLeuHisIleIleIle 216
Db 2027 AGCAAGAGTTCATCCGCTGATCCGTTCTCTCTCCATGGCTTCTTTTCATGATCTTC 2086
QY 217 ThrMetThrGluValLeuTyr---ProValTyrValThrLeuArgCysAspSerAlaPhe 235
Db 2087 CAGATTGGAGTTCAGTCTTTGGACCAACATATGTTGTTA-----GCATAT 2134
QY 236 LeuSerGlyValThrLeuMetLeuLeuThrCysIleValThrLeuLysLeuValSerTyr 255
Db 2135 ACACCTGCCACCACTTCCCGTTTCATCATATATATGAGCAGATCTCTTTGTAATGAAG 2194
QY 256 AlaHisThr-----SerTyrAspIleArgSerLeuAlaAsnAlaAlaAspLysAla 272
Db 2195 GCCACCTCATTTGTCAGAGAACGTCGCGGTACTAATTCAGTACAGGAGAAATCA 2254
QY 273 Asn-----ProGluValSerTyrTyrValSerLeuLysSerLeuAlaTyrPhe 288
Db 2255 AGCACTGTTCCAAATACCTACAGTCAACAGTATTG-----TACTTC 2296
QY 289 MetValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAlaCysIleArgLys 308
Db 2297 TTATTTGCTCTACCTTATCTACCGTACAGCTATCCAGGAATCCCACTGTAAGATGG 2356
QY 309 GlyTrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMetGlyPheIle 328
Db 2357 GGTATGTGCTATGAGTTTGACAGGCTCTTGGTGTCTTTTCTATGTACTACTACT 2416
QY 329 IleGluGlnTyrIleAsnProIleValArgAsnSerLys---HisProLeuLysGlyAsp 347
Db 2417 TTTGAAAGGCTTGTGCCCCCTTTGTCGAATATCAACAGGAGCGCTTCAGCGCT--- 2473
QY 348 LeuLeuTyrAlaIleGluArgValLeuLysLeuSerVal-----ProAsn 362
Db 2474 -----CGTTCTGGTCTATGTTGTTTACTCCATCTCCAGCT 2515
QY 363 LeuTyrValTrpLeuCysMetPheTyrCysPhePheHisLeuTrpLeuAsnIleLeuAla 382
Db 2516 GTGCTGATTTCTCTCTTCTTTTTCCTTTTTCGCTGCTGCTGCTCAATGCCTTTGCT 2575
QY 383 GluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTrpTrpAsnAlaLysSerVal 402
Db 2576 CAGATGTTACGCTTTGTTGTCAGAGATGTTCTATAAGGATTTGGTGAACCTCCACGCTAC 2635
QY 403 GlyAspTrpTrpArgMetTrpAsnMetProValHisLysTrpMetValArgHisIleTyr 422
Db 2636 TCCAACTATTATAGAACCTGGAATGTTGTTGCTCCATGCTGCTATATTACTATGCTTAC 2695
QY 423 -----PheProCysLeuArgSerLysIleProLysThrLeuAlaIleIleAlaPhe 440
Db 2696 AAGGACTTTCTCTGTTTCTCCAGAGATTCAAATCTGCTGCCATGTTAGCTGCTTT 2755
QY 441 LeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArg-----456
Db 2756 GCTGTATCTGCTGTAGTACAGATATATGCTTGGCTGTT---TGCCTGAGCTTTTCTAT 2812
QY 457 -----LeuPheLysLeuTrpAlaPheLeuGlyIleMetPheGlnValProLeuValPhe 474
Db 2813 CCGGTGCTGTGCTGCTCTTCATGTTCTTTTGGAAATGCTTTCAAC-----TTC 2860
QY 475 IleThrAsnTyrLeuGlnGluArgPheGlySerThrValGlyAsnMetIlePheTrp---493
Db 2861 ATTGTCAATGATAGTCGGAAGAG-----CCGATTTGGAATGTTCTCATGTGGACT 2911
QY 494 -----PheIlePheCysIlePheGlyGln 501
Db 2912 TCTCTTTTCTGGCAATGAGGAGTCTTACTCTGCTTTTATTCTCAA 2956

RESULT 11
US-08-509-187D-3
; Sequence 3, Application US/08509187D
; Patent No. 5834283
; GENERAL INFORMATION:

```

APPLICANT: Chang, Ta-Yuan and Chang, Catherine C.Y.
 TITLE OF INVENTION: ACYL Coenzyme A: Cholesterol Acyltransferase
 NUMBER OF SEQUENCES: 9
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: LAHIVE & COCKFIELD, LLP
 STREET: 28 State Street
 CITY: Boston
 STATE: Massachusetts
 COUNTRY: USA
 ZIP: 02109

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/509,187D
 FILING DATE: 31-JUL-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:

FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Lamport Hammitte, Ann
 REGISTRATION NUMBER: 34,858
 REFERENCE/DOCKET NUMBER: DCI-033cpdv

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617)227-7400
 TELEFAX: (617)742-4214
 INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
 LENGTH: 4011 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA
 FEATURE:

NAME/KEY: CDS
 LOCATION: 1397..3046
 US-08-509-187D-3

Alignment Scores:
 Pred. No.: 8.56e-35 Length: 4011
 Score: 412.50 Matches: 148
 Percent Similarity: 42.46% Conservative: 50
 Best Local Similarity: 27.56% Mismatches: 173
 Query Match: 14.89% Indels: 136
 DB: 2 Gaps: 23

US-09-623-514A-2 (1-520) x US-08-509-187D-3 (1-4011)

Qy 17 GlyGlyGluPheValAlaAspLeuAspArgLeuArgArgLysSerArgSerAspSerSer 36
 Ds 1604 GGCAAGTCACTTTGATGATTTTGTGACCAATCTCATTTGAAAAGTCAGCATCATATAGATAAT 1663

Qy 37 AsnGlyLeu-----LeuLeuSerGlySerAspAsnAsnSerProSer 50
 Ds 1664 GGTGGGGCGGCTCTCACACCTTTTCTGTTTCTGAGGAGAGAAAACACCATAGACGG 1723

Qy 51 AspAspValGlyAlaProAlaAspValArgAspArgIleAspSerValValAsnAspAsp 70
 Ds 1724 AAGGATTGAGACGACCTCCAGAA-----1747

Qy 71 AlaGlnGlyThrAlaAsnLeuAlaGlyAspAsnAsnGlyGlyGlyAspAsnAsnGlyGly 90
 Ds 1748 ---CAAGGAAGATTTTATT-----1765

Qy 91 GlyArgGlyGlyGlyGluGlyArgGlyAsnAlaAspAlaThrPheThrArgProSer 110
 Ds 1765 -----1765

Qy 111 ValProAlaHisArgAlaArgGluSerProLeuSerSerAspAlaIlePheLysGln 130
 Ds 1765 -----1765

Db 1766 -----GCAAGGCGCTCTCTCTTA-----GATCAACTGCTTGAAGTG 1801

Qy 131 SerHis---AlaGlyLeuPheAsnLeuCysValValValLeuLeuAla---ValAsnSer 148
 Ds 1802 GACCACATCAGAACAAATATATACATGTTATTCCTCCTCATTTCTTTATTCCTCAGC 1861

Qy 149 ArgLeuLeuLeuGlu-AsnLeuMetLysTyrGlyTyrLeuLeuLeuArgThrAspPheTyrPh 168
 Ds 1862 ACATTGTAGTAGATTACATTGATGAGGAGGCTGGTCTTGAGT-----1907

Qy 168 eSerSerArgSerLeuArg-AspTyrProLeuPheMetCysCysIleSerLeuSerIle 187
 Ds 1908 -TCAGCCCTCTGCTTATGCTTTTGGCAAATTCCTACCGTGTGTGGACCTGGTGATC 1966

Qy 188 PheProLeuAlaAlaPheThrValGluLysLeuValLeuGlnLysTyr-----203
 Ds 1967 AGTTTCCTGCTACATTTTCAGTTCCTTCTTCTTTCACATTCGCGCACTGGCTAT 2026

Qy 204 -----IleSerGluProValValIle-----PheLeuHisIleIleIle 216
 Ds 2027 AGCAGAGTTCTCATCCGCTGATCGTCTCTCTTCATGGCTTTCTTTTCATGATCTTC 2086

Qy 217 ThrMetThrGluValLeuTyr---ProValTyrValThrLeuArgCysAspSerIleAla 235
 Ds 2087 CAGATTGGAGTTCTAGGTTTGGACCAACATATGTTGTGTA-----GCATAT 2134

Qy 236 LeuSerGlyValThrLeuMetLeuLeuThrCysIleValThrLeuLysLeuValSerTyr 255
 Ds 2135 ACNTGCCACCAGCTTCCGGTTCATCATATATTCGAGCAGATTCGTTTGTATATGAAG 2194

Qy 256 AlaHisThr-----SerTyrAspIleArgSerLeuAlaAsnAlaAlaAspLysAla 272
 Ds 2195 GCGCACTCATTTGTCAGAGAGACGTCCTCGGTACTTAATTCAGCTAAGAGAAATCA 2254

Qy 273 Asn-----ProGluValSerTyrTyrValSerLeuLysSerLeuAlaTyrPhe 288
 Ds 2255 AGCACTGTTCCAATACCTACAGTCAACCACTATTG-----TACTTC 2296

Qy 289 MetValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAlaCysIleArgLys 308
 Ds 2297 TTATTGCTCTTACCTTATCTACGTCGACAGCTATCCAGGAATCCCACTAGATAG 2356

Qy 309 GlyTyrValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMetGlyPheIle 328
 Ds 2357 GGTATGTCGATAGAGTTTGACAGAGCTTTGCTGCTTTCTTCTGCTGCTACTACATC 2416

Qy 329 IleGluGlnTyrIleAsnProIleValArgAsnSerLys---HisProLeuLysGlyAsp 347
 Ds 2417 TTTGAAAGGCTTTGTGCCCCCTTTGTCGATATATCAACAGGAGCCCTTCAGCGCT---2473

Qy 348 LeuLeuTyrAlaIleGluArgValLeuLysLeuSerVal-----ProAsn 362
 Ds 2474 -----CGTGTCTGCTCTATGATATTAACTTCCTTTCGCGAGT 2515

Qy 363 LeuTyrValTyrLeuCysMetPheTyrCysPheHisLeuTyrPheAsnIleLeuAla 382
 Ds 2516 GTGCTGATCTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 2575

Qy 383 GluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTyrTyrAsnAlaLysSerVal 402
 Ds 2576 GAGATGTTACGCTTTGGTGACAGGATGTTCTATAGAGATTGGTGGAACTCCACGCTAC 2635

Qy 403 GlyAspTyrTyrArgMetTyrAsnMetProValHisLysTyrMetValArgHisIleTyr 422
 Ds 2636 TCCAACTATTATAGAACCTGGAATGTGTGTCCTGCTGCTGCTGCTGCTGCTGCTGCT 2695

Qy 423 -----PheProCysLeuArgSerLysIleProLysThrLeuAlaIleIleIleAla 440
 Ds 2696 AAGGACTTCTCTGCTTTTCTCCAGAGATTCAATCTGCTGCTGCTGCTGCTGCTGCT 2755

Qy 441 LeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArg-----456
 Ds 2756 GCTGTATCTGCTGTAGTACAGGAATATGCTTGGCTGT---TGCTGAGCTTTTCTTAT 2812


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QY 329 IleGluGlnTyrIleAsnProIleValArgAsnSerLys---HisProLeuLysGlyAsp 347
DB 2417 TTTGAAGGCTTTGGCCCTTGT---TCGGAATATCAAAACAGAGCCCTTCAGCGCT--- 2473
QY 348 LeuLeuTyrAlaIleGluArgValLeuLysLeuSerVal-----ProAsn 362
DB 2474 -----CGTGTCTGGTCCCTATGTGTATTAACTCCATCTTGCAGGT 2515
QY 363 LeuTyrValTyrLeuCysMetPheTyrCysPhePheHisLeuTyrLeuAsnIleLeuAla 382
DB 2516 GTGTCGATCTCTTCCTTACTTTTTCCTTTTGGCTTTTGCACCTGTGCTGCTCAATGCCCTTTGCT 2575
QY 383 GluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTyrTyrAsnAlaLysSerVal 402
DB 2576 GAGATGTTACGCTTTGGTGACAGGATCTCTATAAGGATGGTGGAACTCCACGTCATAC 2635
QY 403 GlyAspTyrTyrArgMetTyrAsnMetProValHisLysTyrMetValArgHisIleTyr 422
DB 2636 TCCCACTATATAGACCTGGATGGTGGTCCATGCTGCTATATTACTATGCTTAC 2695
QY 423 -----PheProCysLeuArgSerLysIleProLysThrLeuAlaIleIleAlaPhe 440
DB 2696 RAGGACTTCTCTGGTTTCTCCAAAGATTCAAAATCTGCTGCCATGTGTAGCTGCTTT 2755
QY 441 LeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArg----- 456
DB 2756 GCTGACTCTGCTGTAGTACCAAAATATGCTTGGCTGT---TGCTGAGCTTTTCTAT 2812
QY 457 -----LeuPheLysLeuTyrAlaPheLeuGluGlyIleMetPheGlnValProLeuValPhe 474
DB 2813 CCGGCTGCTTCTGCTCTTCATGTTCTTGGAAATGCTTCAAC-----TTC 2860
QY 475 IleThrAsnTyrLeuGluGluArgPheGlySerThrValGlyAsnMetIlePheTyr--- 493
DB 2861 ATTGCAATGATAGTCGAAAAAG-----CCGATTGGAAATGTTCTGATGCGACT 2911
QY 494 -----PheIlePheCysIlePheGlyGln 501
DB 2912 TCTCTTCTTGGGCAATGGAGTCTTACTCTGCTTTTATCTCMA 2956

RESULT 14
US-08-121-057-2
; Sequence 2, Application US/08121057
; Patent No. 5484727
; GENERAL INFORMATION:
; APPLICANT: CHANG, TA-YUAN
; TITLE OF INVENTION: ACYL COENZYME A: CHOLESTEROL
; TITLE OF INVENTION: ACYLTRANSFERASE (ACAT)
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSER: LAHIVE & COCKFIELD
; STREET: 60 STATE STREET, SUITE 510
; CITY: BOSTON
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII Text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/121,057
; FILING DATE:
; CLASSIFICATION: 820
; ATTORNEY/AGENT INFORMATION:
; NAME: LAMPORT HAMMITTE, ANN.
; REGISTRATION NUMBER: 34,858
; REFERENCE/DOCKET NUMBER: DCI-033CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-2700
; TELEFAX: (617) 227-5941

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; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4079 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-121-057-2

Alignment Scores:
Pred. No.: 5,23e-34 Length: 4079
Score: 405.50 Matches: 148
Percent Similarity: 41.36% Conservative: 77
Best Local Similarity: 27.21% Mismatches: 167
Query Match: 14.63% Indels: 153
DB: Gaps: 24

US-09-623-514A-2 (1-520) x US-08-121-057-2 (1-4079)

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DB 1675 GGCAGTCACCTTTGATGATTTTGTGACCAATCTCATTTGAAGAGAGAGAAAACACCATAGAGCG 1734
QY 37 AsnGlyLeu-----LeuLeuSerGlySerAspAsnAsnSerProSer 50
DB 1735 GGTGGTGGCTCTCACAACTTTTCTGTCTTGAAGGAGAGAAAACACCATAGAGCG 1794
QY 51 AspAspValGlyAlaProAlaAspValArgAspArgIleAspSerValValAsnAspAsp 70
DB 1795 AAGGATTTGAGAGCACCTCCAGAA----- 1818
QY 71 AlaGlnGlyThrAlaAsnLeuAlaGlyAspAsnAsnGlyGlyCysAspAsnAsnGlyGly 90
DB 1819 ---CAAGGAAGATTTTATT----- 1836
QY 91 GlyArgGlyGlyGlyGluGlyArgGlyAsnAlaAspAlaThrPheThrTyrArgProSer 110
DB 1836 ----- 1836
QY 111 ValProAlaHisArgArgAlaArgGluSerProLeuSerSerAspAlaIlePheLysGln 130
DB 1837 -----GCAAGGCGCTCTCTCTTA-----GATGAACCTGCTTGAAGTG 1872
QY 131 SerHis---AlaGlyLeuPheAsnLeuCysValValValLeuIleAla---ValAsnSer 148
DB 1873 GACCACATCAGAACATATATACATGTTTATGGCCCTCTCTCATCTCTTATCTCTCAGC 1932
QY 149 ArgLeuIleIleGlu-AsnLeuMetLysTyrGlyTyrLeuIleArgThrAspPheTyrPh 168
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QY 168 eSerSerArgSerLeuArgAspTyrProLeuPheMetCysCysIleSerLeuSerIlePh 188
DB 1985 -----CCTCTGTCTTATGCATT-----TTGCAAA-TT 2012
QY 188 eProLeuAlaAlaPheThrValGluLysLeuValLeuGlnLysTyrIleSerGluProva 208
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QY 208 lValIlePheLeuHisIleIleIleThrMetThrGluValLeuTyrProValTyrValTh 228
DB 2070 TTTTCTGTTTCAACATTGGCGCACTGGCTATAGCAAGAGTTCTCATCCGCTGATCCGTTT 2129
QY 228 rLeuArgCysAspSerAlaPheLeu-----SerGlyValThrLeuMetLeuLeuTh 245
DB 2130 TCTCTTCCATGGCTTTCTTTTTCATGATCTTCCAGATTGGAGTTCTAGTTTTCGACCAAC 2189
QY 245 rCysIleValTyrLeuLysLeuValSerTyrAlaHisThrSer-----Tyr 260
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QY 260 rAspIleArgSerLeuAlaAsn----- 267

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2238 TTCGACGAGATCGTTTGTAAATGAAGGCCCACTCATTTGTGCAGAGCAAGCTGCCTCGG 2297
QY 268 -----AlaAlaAspLysAlaAsn-----ProGluValSerTyrTyrVa 280
Db 2298 TACTAATTCAGCTAAGGAGAAATCAAGCACGTGTTCCAAATACCTACAGTCAACCAAGATATT 2357
QY 280 LseLysSerLeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnProSerTy 300
Db 2358 G-----TACTTCTATTGCTCTACCTTATCTTACCGTGACAGTGA 2399
QY 300 rProArgSerAlaCysIleArgLysGlyTyrValAlaArgGlnPheAlaLysLeuValI 320
Db 2400 TCCAGGAAATCCCACTTAAGATGGGTATGTGCTATGAGTTGACAGGTGCTTTGG 2459
QY 320 ePheThrGlyPheMetGlyPheIleLeuGlnTyrIleAsnProIleValArgAsnSe 340
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QY 340 rLys---HisProLeuLysGlyAspLeuLeuTyrAlaIleGluArgValLeuLysLeuSe 359
Db 2520 CAAACAGGAGCCCTCAGCGCT-----CGTGTCTGCTCTATG 2558
QY 359 rVal-----ProAsnLeuTyrValTrpLeuCysMetPheTyrCysPhePh 374
Db 2559 TGTATTAACTCCATCTTGCAGGCTGCTGATTCTCTTCTTCTTCTTCTTCTTCTTCTT 2618
QY 374 eHisLeuTrpLeuAsnIleLeuAlaGluLeuLeuCysPheGlyAspArgGluPheTyrLy 394
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QY 414 sLysTrpMetValArgHisIleTyr-----PheProCysLeuArgSerLysIleProLy 432
Db 2739 TGACTGTGCTATTATAC---ATGCTTACAGGACTTTCTCTGGTTTCTTCTCAAGAGATTCAA 2798
QY 432 sThrLeuAlaIleIleLeuAlaPheLeuValSerAlaValPheHisGluLeuCysIleAl 452
Db 2799 ATCTGTGCTCAATGTGCTTGTGTTATCTGCTGATCTCTTCTGCTTCTTCTGGAAT 2858
QY 452 aValProCysArg-----LeuPheLysLeuTrpAlaPheLeuGlyI 466
Db 2859 TGTT---TGCTGAGCTTTTCTATCCCGTCTGTGCTGCTTCTTCTGATTTCTTGGAT 2915
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QY 486 rValGlyAsnMetIlePheTrp-----PheIlePheCysI 498
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RESULT 15

US-08-509-187D-2
; Sequence 2, Application US/08509187D
; Patent No. 5834283
; GENERAL INFORMATION:
; APPLICANT: Chang, Ta-Yuan and Chang, Catherine C.Y.
; TITLE OF INVENTION: ACYL Coenzyme A: Cholesterol Acyltransferase
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109

COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/509,187D
; FILING DATE: 31-JUL-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lamport Hammitte, Ann
; REGISTRATION NUMBER: 34,858
; REFERENCE/DOCKET NUMBER: DCI-033cpdv
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)742-4214
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4079 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-509-187D-2
Alignment Scores:
Pred. No.: 5,236-34 Length: 4079
Score: 405.50 Matches: 148
Percent Similarity: 41.36% Conservative: 77
Best Local Similarity: 27.21% Mismatches: 167
Query Match: 14.63% Indels: 153
Gaps: 24
US-09-623-514A-2 (1-520) x US-08-509-187D-2 (1-4079)
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QY 37 AsnGlyLeu-----LeuLeuSerGlySerAspAsnAsnSerProSer 50
Db 1735 GGTGGTGGCTCTCACAACTTTTCTGTCTTGAAGGAGAGAGAAACACCATAGAGCG 1794
QY 51 AspAspValGlyAlaProAlaAspValArgAspArgIleAspSerValValAsnAspAsp 70
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Job time : 150 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein: - nucleic search, using frame_plus_p2n model

Run on: May 5, 2004, 13:34:09 ; Search time 546 Seconds
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Searched: 2336184 seqs, 2261732022 residues

Total number of hits satisfying chosen parameters: 5872368

Minimum DB seq length: 3

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Post-processing: Minimum Match 0%

Listing first 45 summaries

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-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THRRADS=1 -XGAPOP=10 -XGAPEXT=0.5
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Database :

Published Applications NA:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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RESULT 1
US-10-223-076-2
; Sequence 2, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; FILE REFERENCE: UCAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17

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4	2309.5	83.3	1512	15	US-10-223-076-8	Sequence 8, Appli
5	1880	67.8	2090	15	US-10-223-076-10	Sequence 10, Appli
6	1854	66.9	1964	15	US-10-223-076-14	Sequence 14, Appli
7	1853.5	66.9	1621	13	US-10-425-114-10163	Sequence 10163, A
8	1849.5	66.7	1888	13	US-10-424-599-111496	Sequence 111496, A
9	1842.5	66.5	2099	15	US-10-223-076-12	Sequence 12, Appli
10	1833	66.1	1446	15	US-10-223-076-6	Sequence 6, Appli
11	1342	48.4	1150	16	US-10-260-238-310	Sequence 310, App
12	1279	46.2	1572	15	US-10-223-076-17	Sequence 17, Appli
13	1067.5	38.5	1181	13	US-10-223-076-16	Sequence 16, Appli
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26	764.5	27.6	1732	17	US-10-415-620-4	Sequence 4, Appli
27	762.5	27.5	1497	15	US-10-278-733-3	Sequence 3, Appli
28	753.5	27.2	1470	15	US-10-425-114-13703	Sequence 13703, A
29	753.5	27.2	1470	15	US-10-278-733-4	Sequence 4, Appli
30	751.5	27.1	1470	15	US-10-278-733-7	Sequence 7, Appli
31	724.5	26.1	1497	15	US-10-278-733-5	Sequence 5, Appli
32	720.5	26.0	1698	15	US-10-278-733-6	Sequence 6, Appli
33	709.5	25.6	1895	14	US-10-157-855-14	Sequence 14, Appli
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35	696.5	25.1	1411	15	US-10-273-438-1	Sequence 1, Appli
36	696.5	25.1	1411	15	US-10-040-315A-1	Sequence 1, Appli
37	696.5	25.1	1411	17	US-10-659-800-1	Sequence 1, Appli
38	652.5	23.5	629	15	US-10-273-438-4	Sequence 4, Appli
39	652.5	23.5	629	15	US-10-223-076-1	Sequence 1, Appli
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42	590	21.3	1035	15	US-10-369-493-30171	Sequence 68082, A
43	589	21.3	775	13	US-10-424-599-68082	Sequence 79, Appli
44	573.5	20.7	993	9	US-09-764-853-79	Sequence 36279, A
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; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (139)...(1701)
US-10-223-076-2

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Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 15 Gaps: 0

US-09-623-514A-2 (1-520) x US-10-223-C76-2 (1-1904)

QY 1 MetAlaLeuAspSerAlaGlyValThrValThrGluAsnGlyGlyGluPhe 20
Db 139 ATGGCGATTTTGGATCTCTGGCGTTACTAGCGTGCAGGAGAACGGTGGCGAGAGTTTC 198
QY 21 ValAspLeuAspArgLeuArgArgGlySerArgSerAspSerSerAsnGlyLeuLeu 40
Db 199 GTCGATCTTGATAGGCTTCGTCAGCGAAATCGAGATCGGATCTCTTAACGGACATCTT 258
QY 41 LeuSerGlySerAspAsnAsnSerProSerAspValGlyAlaProAlaAspValArg 60
Db 259 CTCCTCGTTCCGATTAATCTCTCTCGATGATGTTGGAGCTCCCGCGGACGTTAGG 318
QY 61 AspArgLeuAspSerValValAsnAspAspAlaGlnGlyThrAlaAsnLeuAlaGlyAsp 80
Db 319 GATCGGATTTGATTCGCTGTTTAAACGATGACGCTCAGCGAACACGCCAATTTGGCGCGAGAT 378
QY 81 AsnAsnGlyGlyGlyAspAsnAsnGlyGlyGlyArgGlyGlyGlyGlyGlyGlyGlyGly 100
Db 379 AATAACGGTGGTGGCGATTAATTAACGGTGGTGGAGAGGCGCGGAGAGAGAGAGAGAG 438
QY 101 AlaAspAlaThrPheThrTyrArgProSerValProAlaHisArgAlaArgGlySer 120
Db 439 GCGGATGCTACGTTTACGATATCGACCTCGGTTCCAGCTCATCGAGGGCGAGAGAGAT 498
QY 121 ProLeuSerSerAspAlaLeuPheLeuGlnSerHisAlaGlyLeuPheAsnLeuCysVal 140
Db 499 CCACATTAGCTCCGACGCAATCTTCAACAGACAGACCATCGCGGATTTCAACCTCTGTGTA 558
QY 141 ValValLeuLeuAlaValAsnSerArgLeuLeuLeuGluAsnLeuMetLysTyrGlyTyr 160
Db 559 GTAGTCTTATTCCTGTAACAGTACGATCTCATCTCGAATAATCTTATGAAGTATGTTGG 618
QY 161 LeuLeuArgThrAspPheThrPheSerSerArgSerLeuArgAspTrpProLeuPheMet 180
Db 619 TTGATCAGAACGATTTCTGTTTGTAGTTCAAGATCGCTGCGAGATTGGCGGCTTTTCATG 678
QY 181 CysCysLeuSerLeuSerLeuPheProLeuAlaAlaPheThrValGluLysLeuValLeu 200
Db 679 TGTGTATATCCCTTCGATCTTCTCCCTTGGCTTTCGCTTACGTTGAGAAATTTGGTACTT 738
QY 201 GlnLysTyrLeuSerGluProValValLeuPheLeuHisLeuLeuLeuLeuLeuLeuLeu 220
Db 739 CAGAAATACATATCAGAACTGTTGTCATCTTTCTTCATATATATATATATATATATATAT 798
QY 221 ValLeuTyrProValTyrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThr 240
Db 799 GTTTGTATCCAGTTTACGTCACCTTAAGTGTGATCTCTGCTTTTATCAGGTTGTCAT 858
QY 241 LeuMetLeuLeuThrCysLeuValThrLeuLysLeuValSerTyrAlaHisThrSerTyr 260
Db 859 TTGATGCTCCTCACTTGCATTTGTTGGCTAAAGTTGGTTTCTTATGCTATACATAGCTAT 918
QY 261 AspLeuArgSerLeuAlaAspAlaAlaAspLysAlaAsnProGluValSerTyrVal 280

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Db 919 GACATAGATCCCTAGCAATGAGCTGATAGGCCAATCCCTAGAGTCTCTACTAGCTT 978
QY 281 SerLeuLysSerLeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnProSerTyr 300
Db 979 AGCTTGAGAGAGCTTGGCATAATTTATGTTGCTCCACCATTTGTTTATCAGCCAGGTTAT 1038
QY 301 ProArgSerAlaCysLeuArgGlyGlyTyrValAlaArgGlnPheAlaLysLeuValLeu 320
Db 1039 CCACGTTCTGCATGATATACGGAAGGTTGGTGGCTCGGCAATTTGCAGAACTGGTCATA 1098
QY 321 PheThrGlyPheMetGlyPheLeuLeuGluGlnTyrIleAsnProIleValArgAsnSer 340
Db 1099 TTCACCGGATTCATGGGATTTATATAGAACATATATAAATCCTATTGTGAGAACTCA 1158
QY 341 LysHisProLeuLysGlyAspLeuLeuTyrAlaLeuGluArgValLeuLysLeuSerVal 360
Db 1159 AAGCATCCTTTGAAAGCGCATCTTCTATATGCTATTGAAAGAGTGTGGAAGCTTCAGTT 1218
QY 361 ProAsnLeuTyrValTrpLeuCysMetPheTyrCysPhePheHisLeuTrpLeuAsnLeu 380
Db 1219 CCAATTTATGTTGGCTCTGCAATTTCTACTGCTTCTCCACCTTTCGTTTAAACATA 1278
QY 381 LeuAlaGluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTrpTrpAsnAlaLys 400
Db 1279 TTGGCAGAGCTTCTCTGCTTCGGGGATCGTGAATTTCTACAAAGATTGGTGGATGCAAAA 1338
QY 401 SerValGlyAspTyrTrpArgMetTrpAsnMetProValHisLysTrpMetValArgHis 420
Db 1339 AGTGTGGGATTTACTGGGAATTTGGAATATATCCTGTTTCAATGATGGATGGTTTCGAT 1398
QY 421 IleTyrPheProCysLeuArgSerLysLeuLeuLeuLeuLeuLeuLeuLeuLeuLeu 440
Db 1399 ATATATTTCCGCTGCTTGGCAGACAGATACCAAGACACATCGCCATATATATGCTTTC 1458
QY 441 LeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheLysLeu 460
Db 1459 CTAGTCTCTGAGCTTTTCATGAGCTATGATGATGATGATGATGATGATGATGATGATG 1518
QY 461 TrpAlaPheLeuGlyLeuMetPheGlnValProLeuValPheLeuThrAsnTyrLeuGln 480
Db 1519 TGGGCTTTTCTTGGGATTTATGTTTTCAGGTGCTTTCAGTTCATCAACAACTATCTACAG 1578
QY 481 GluArgPheGlySerThrValGlyAsnMetIlePheThrPheIlePheCysIlePheGly 500
Db 1579 GAAAGGTTTGCTTCACCGTGGGAGACATGATCTTCTGGTTTCATCTTCTGCAATTTTGG 1638
QY 501 GlnProMetCysValLeuLeuTyrTyrHisAspLeuMetAsnArgLysGlySerMetSer 520
Db 1639 CAACCGATGTTGCTGCTTCTTTATACCAAGCTGATGAACCGGAAAGGATCGATGTCAT 1698

RESULT 2
US-10-157-855-1
; Sequence 1, Application US/10157855
; Publication No. US20020170091A1
; GENERAL INFORMATION:
; APPLICANT: Lassen, Michael W.
; APPLICANT: Ruzinsky, Diane M.
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; FILE REFERENCES: 16516.158
; CURRENT APPLICATION NUMBER: US/10/157,855
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 09/326,203
; PRIOR FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1942

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Same, 9/5 Patent 6,440,446

; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-10-157-855-1

Alignment Scores:

Pred. No.: 1,99e-304 Length: 1942
Score: 2771.00 Matches: 520
Percent Similarity: 100.00% Conservations: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 14 Gaps: 0

US-09-623-514a-2 (1-520) x US-10-157-855-1 (1-1942)

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Qy 1 MetAlaLeuAspSerAlaGlyValThrValThrGluAsnGlyGlyGlyPhe 20
Db 237 ATGCGATTGTTGATTCCTGCTGGCGTTACTACGGTGACGGGAACGGTGGCGGAGAGTTC 296
Qy 21 ValAspLeuAspArgLeuArgArgArgSerArgSerAspSerAsnGlyLeu 40
Db 237 GTCCGATCTTGATAGGCTTCGTCGACGGAAATCGAGATCGGATTCCTTAACGGACTTCCT 356
Qy 41 LeuSerGlySerAspAsnSerProSerAspValGlyValProAlaAspValArg 60
Db 357 CTCTCTGGTCCGATATAATCTCTCTCCATGATGTGGAGCTCCCGCGCGAGGTAGG 416
Qy 61 AspArgLeuAspSerValValAspAspAlaGlnGlyThrAlaAsnLeuAlaGlyAsp 80
Db 417 GATCGGATTGATTCGGTTGTTAAAGCATGACCTCAGGGAACAGGCCAATTTGGCCGAGAT 476
Qy 81 AsnAsnGlyGlyGlyAspAsnAsnGlyGlyGlyArgGlyGlyGlyValAsn 100
Db 477 AATAACGGTGTGGCGATATAACGGTGTGGAGAGCGCGGAGAGAGGAGGAAAC 536
Qy 101 AlaAspAlaThrPheThrArgProSerValProAlaHisArgArgAlaArgGluSer 120
Db 537 GCCGATGCTAGTTACGATCGACCGTCGGTTCAGCTCATCGGAGGCGGAGAGAGAGT 596
Qy 121 ProLeuSerSerAspAlaLeuPheLysGlnSerHisAlaGlyLeuPheAsnLeuCysVal 140
Db 597 CCACCTAGTCCGACGCAATCTCAACAGAGCATGCCGATTAATCAACCTCTGTGTA 656
Qy 141 ValValLeuLeuAlaValAsnSerArgLeuLeuLeuGluAsnLeuMetLysThrGlyTrp 160
Db 657 GTAGTCTCTATGCTGTAAACAGTAGATCTCATCTCGAAATCTTATGAAGTAGTGTGG 716
Qy 161 LeuLeuArgThrAspPheThrPheSerSerArgSerLeuArgAspTrpProLeuPheMet 180
Db 717 TTGATCAGACGGATTCCTGGTTAGTTCAAGATCGCTGCGAGATTGCCGCTTTCATG 776
Qy 181 CysCysLeuSerLeuSerIlePheProLeuAlaAlaPheThrValGluLysLeuValLeu 200
Db 777 TGTGTATATCCCTTCGATCTTCCTTGGCTGCTTATAGCGTTGAGAAATTTGTACTT 836
Qy 201 GlnLysThrIleSerGluProValValIlePheLeuHisIleIleIleThrMetThrGlu 220
Db 837 CAGAAATACATATCAGAACCTGTGTCTCTCTCTCATATATATATATATATATATATAT 896
Qy 221 ValLeuThrProValThrLeuArgCysAspSerAlaPheLeuSerGlyValThr 240
Db 897 GTTGTGATCCAGTTTACGTACCCCTAAGGTGTGATCTCTGCTTTTATATAGTGTCACT 956
Qy 241 LeuMetLeuLeuThrCysIleValThrLeuLysLeuValSerThrAlaHisThrSerThr 260
Db 957 TTGATGCTCTCTCACTTGTGATGTGGGTAAAGTTGGTTCTTATATGCTCATAGCTAT 1016
Qy 261 AspIleArgSerLeuAlaAsnAlaAlaAspLysAlaAsnProGluValSerThrVal 280
Db 1017 GACATAAGATCCCTAGCCCAATGACATGATAGGCCAATCTCGAAGTCTCTTACCTAGCT 1076
Qy 281 SerLeuLysSerLeuAlaThrPheMetValAlaProThrLeuCysThrGlnProSerThr 300
Db 1077 AGCTTGAAGACTTGGCAATATTCATGTCGTCCTCCACATTTGTGTATATCAGCCAGATTAT 1136

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Qy 301 ProArgSerAlaCysIleArgLysGlyTrpValAlaAlaArgGlnPheAlaLysLeuValIle 320
Db 1137 CCACGTTCTGCATGTATACGGAAGGTTGGGTGGCTCGTCAATTTGCAAAATCGGTCTATA 1196
Qy 321 PheThrGlyPheMetGlyPheIleIleGluGlnThrIleAsnProIleValArgAsnSer 340
Db 1197 TTCACCGGATTCATGGGATTTATATATAGACAAATATATATATATATATATATATATAT 1256
Qy 341 LysHisProLeuLysGlyAspLeuLeuThrAlaIleGluArgValLeuLysLeuSerVal 360
Db 1257 AAGCATCTTTGAAAGGCGATCTTCTATATGCTATTGAAAGAGTGTGGAAGCTTCAGTT 1316
Qy 361 ProAsnLeuThrValTrpLeuCysMetPheThrCysPhePheHisLeuTrpLeuAsnIle 380
Db 1317 CCAAAATTTATATGTGTGCTCTGCAATGTTCTACTGCTCTTCCACCTTTGGTTAAACATA 1376
Qy 381 LeuAlaGluLeuLeuCysPheGlyAspArgGluPheThrLysAspTrpAsnAlaLys 400
Db 1377 TTGGCAGAGCTTCTCTGCTTGGGGATCGTGAATTTCAAGAGATTGGTGGATCGAAAA 1436
Qy 401 SerValGlyAspThrTrpArgMetTrpAsnMetProValHisLysTrpMetValArgHis 420
Db 1437 AGTGTGGGAGATTACTGGAGAATGTGAATATGCTGCTTCAATAATGGATGCTTCGACAT 1496
Qy 421 IleThrPheProCysLeuArgSerLysIleProLysThrLeuAlaIleIleAlaPhe 440
Db 1497 ATATACCTCCCGTGTGCGCAGCAAGATATACCAAGACACTCGCCATATATCAATGCTTTC 1556
Qy 441 LeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheLysLeu 460
Db 1557 CTAGTCTCTGCGAGCTTTCATGAGCTATGCAATCGCAGTTCCTTGTCTCTCTCAAGCTA 1616
Qy 461 TrpAlaPheLeuGlyIleMetPheGlnValProLeuValPheIleThrAsnThrLeuGln 480
Db 1617 TGGGCTTCTTCTGGATTAATGTTTCAAGTGCTTGGTCTTCATCACAACTATCTACAG 1676
Qy 481 GluArgPheGlySerThrValGlyAsnMetIlePheThrPheIlePheCysIlePheGly 500
Db 1677 GAAAGGTTGGCTCAACGGTGGGAACATGATCTTCTGCTTCATCTTCGCAATTTTCGA 1736
Qy 501 GlnProMetCysValLeuLeuThrThrHisAspLeuMetAsnArgLysGlySerMetSer 520
Db 1737 CAACCGATGTGTGCTTCTTATATCCACGACCTGATGAACCGAAAGATCGATGTCA 1796

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RESULT 3

US-10-223-076-4
; Sequence 4, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: UCAI-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1537
; TYPE: DNA
; ORGANISM: Brassica napus

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FEATURE:
NAME/KEY: CDS
LOCATION: (2)...(1:07)
US-10-223-076-4

Alignment Scores:
Pred. No.: 7.5e-257      Length: 1537
Score: 2351.50          Matches: 447
Percent Similarity: 89.23%      Conservative: 17
Best Local Similarity: 85.96%    Mismatches: 37
Query Match: 84.86%             Indels: 19
DB: 15                        Gaps: 5

US-09-623-514A-2 (1-520) x US-10-223-076-4 (1-1537)

QY 1 MetAlaileuAspSerAlaGlyValThrValThrGluAsnGlyGlyGluPhe 20
DB 22 ATGGAGATTTCGATCTGGAGGCGTCACATATCCGACGGAGAAGCGTGCT-----72
QY 21 ValAspLeuAspArgLeuArgArgGlySerArgSerAspSerSerAsnGlyLeu 40
DB 73 GCGGATCTCGATACGCTTCGTACCGGAAACCGAGATCGGATCTTCCAAATGGACTTC 132
QY 41 LeuSerGlySerAspAsnSerProSerAspValGlyAlaProAlaAspValArg 60
DB 133 -----CCTGATTCGGTAACGTGTTCCGAT-----GCTGACGTGAGG 168
QY 61 AspArgileAspSerValValAsnAspAspAlaGlyThrAlaAsnLeuAlaGlyAsp 80
DB 169 GATCGGTTGATTTCAGCTGTT-----GAGGATCTCAAGGAAAGCCAAATTTGGCGGAGAA 225
QY 81 AsnAsnGlyGlyGlyAspAsnAsnGlyGlyGlyArgGlyGlyGluGlyArgGlyAsn 100
DB 226 AAGCAA-----ATTAGGAATCCGGTGGAGAGCGGGGGGARAC 264
QY 101 AlaAspAlaThrPheThrTyrArgProSerValProAlaHisArgArgAlaArgGluSer 120
DB 265 GTGGATGTAAAGTACACATATCGCGCGTTCGATCCAGCTCATCGGAGGTGGCGGAGAGT 324
QY 121 ProLeuSerSerAspAlailePheLysGlnSerHisAlaGlyLeuPheAsnLeuCysVal 140
DB 325 CCACCTCAGCTCTGACGCGCATCTTCAACAGAGCCATGCTGGACTATTTCACACCTGTGTGTA 384
QY 141 ValValLeuLeuAlaValAsnSerArgLeuilelelelelelelelelelelelelelele 160
DB 385 GTAGTCTTGCTGTAAACAGTAGACTCATCATCGAAATCTCATGAAGTAGGTTGG 444
QY 161 LeuileArgThrAspPheThrPheSerSerArgSerLeuArgAspTrpProLeuPheMet 180
DB 445 TTGATCAGAACTGATTTCTGTTTAGTTTCAACGCTCTCGGAGATTGGCCCTTTTCATG 504
QY 181 CysCysileSerLeuSerilePheProLeuAlaAlaPheThrValGluLysLeuValLeu 200
DB 505 TGTGTCTCTCCCTTCAATCTTTCCTTTGCGCTTACCGTCGAGAAATAGTACTT 564
QY 201 GlnLysThrileSerGluProValValilePheLeuHisilelelelelelelelelelele 220
DB 565 CAGAAATGCAATCTGAACTGTGTGATCATCTTCTCATATTATATCATCATGACCGAG 624
QY 221 ValLeuTyrProValTyrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThr 240
DB 625 GTCTGTATCCAGCTACGTCACCTCTAAAGGTGTGATTCCGCTCTTATCATGAGTGTCAAG 684
QY 241 LeuMetLeuLeuThrCysilelelelelelelelelelelelelelelelelelelelele 260
DB 685 TTGATGCTCCTCCTGATTTGTTGCTGAAAGTTGTTTCTTACGCTCATACTAAT 744
QY 261 AspLeuArgSerLeuAlaAsnAlaAlaAspLysAlaAsnProGluValSerTyrVal 280
DB 745 GACATAGAAACCTTAGCTAATCATCTGATGAAGCCCAATCTGAAGTCTCTACTAATGTT 804
QY 281 SerLeuLysSerLeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnProSerTyr 300

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DB 805 AGCTTCAGAGAGCTTGGCTATTTTCATGCTTCCACATTTGTTTATCAGCGAGCTAT 864
QY 301 ProArgSerAlaCysileArgLysGlyTyrValAlaArgGlnPheAlaLysLeuValile 320
DB 865 CCACGTTCTCCATGTATCCGAAGGGTGGTGGCTCGTCAATTTGCAAGAGCTGATCATA 924
QY 321 PheThrGlyPheMetGlyPheilelelelelelelelelelelelelelelelelelelelele 340
DB 925 TTCTCTGGATTCTATGGATTATATAGACATATATATATATCTATTTTGGAGACTCA 984
QY 341 LysHisProLeuLysGlyAspLeuLeuTyrAlailelelelelelelelelelelelelelele 360
DB 985 AAACATCCTTTGAAAGGGGATCTTATACGGTGTGAAAGAGTGTGAAAGCTTTCAGTT 1044
QY 361 ProAsnLeuTyrValTyrPheCysMetPheTyrCysPhePheHisLeuTyrPheAsnile 380
DB 1045 CCAAAATTTATACGTGGCTCTCGATGTTCTATCTGCTTCTTCCACCTTTGTTTAAACATA 1104
QY 381 LeuAlaGluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTrpTrpAsnAlaLys 400
DB 1105 TTGGCAGAGCTCTCTGCTTCGGGATCGTGAATTTCTACAAAGATTGGTGGATGCAAAA 1164
QY 401 SerValGlyAspTyrTrpArgMetTrpAsnMetProValHisLysTrpMetValArgHis 420
DB 1165 AGCGTGGAGATTATTGGAGATGCTGATATGCTGTTTCATTAATGATGGTTCGACAT 1224
QY 421 IleTyrPheProCysLeuArgSerLysilelelelelelelelelelelelelelelelelele 440
DB 1225 GTATATCTTCGCGCTTCGAGAAATATACCGAAGTACCGCTATTTATTCCTTCTGCTTTC 1284
QY 441 LeuValSerAlaValPheHisGluLeuCysilelelelelelelelelelelelelelelelele 460
DB 1285 TTAGTCTCTCAGCTCTTTCATGAGTTATGATGATGCTGCTGCTCTCTCTCAAACTA 1344
QY 461 TrpAlaPheLeuGlyileMetPheGlnValProLeuValPheleThrAsnTyrLeuGln 480
DB 1345 TGCGCTTCTTGGGAGTATGTTTTCAGGTGCTTGTGTTTATTTATACAAACTACTACAA 1404
QY 481 GluArgPheGlySerThrValGlyAsnMetPheleThrPhelePheCysilePheGly 500
DB 1405 GAAAGGTTTGGCTCCATGTTGGGGAACATGATATCTGGTTTACCTTCTGATTTTCGGA 1464
QY 501 GlnProMetCysValLeuLeuTyrTyrHisAspLeuMetAsnArgLysGlySerMetSer 520
DB 1465 CAACCGATGTGTGCTTCTTTATATACGACTTGTATGAACCGCAAGGAAGATGTCA 1524

RESULT 4
US-10-223-076-8
Sequence 8, Application US/10223076
Publication No. US20030074695A1
GENERAL INFORMATION:
APPLICANT: Farese, Robert V
APPLICANT: Cases, Sylvaine
TITLE OF INVENTION: Plant Diacylglycerol C-transferase and
FILE REFERENCE: US/10223076
CURRENT APPLICATION NUMBER: US/10223076
CURRENT FILING DATE: 2001-10-29
PRIOR APPLICATION NUMBER: 10/040,315
PRIOR FILING DATE: 2001-10-29
PRIOR APPLICATION NUMBER: 09/339,472
PRIOR FILING DATE: 1999-06-23
PRIOR APPLICATION NUMBER: 60/107,771
PRIOR FILING DATE: 1998-11-09
PRIOR APPLICATION NUMBER: PCT/US98/17883
PRIOR FILING DATE: 1998-08-28
PRIOR APPLICATION NUMBER: 09/103,754
PRIOR FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 1512
TYPE: DNA

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; ORGANISM: Brassica napus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1512)
US-10-223-076-8
Alignment Scores:
Pred. No.: 4,48-252 Length: 1512
Score: 2309.50 Matches: 442
Percent Similarity: 88.10% Conservative: 17
Best Local Similarity: 84.84% Mismatches: 43
Query Match: 83.35% Indels: 19
DB: 15 Gaps: 5

US-09-623-514A-2 (1-520) x US-10-223-076-8 (1-1512)
Qy 1 MetAlaIleLeuAspSerAlaGlyValThrThr---ValThrGluAsnGlyGlyGlu 19
Db 1 ATGGCGATTGTGGATTCTGGAGGCGTCTGTACCGCCGACGGAGAACGGC-----51
Qy 20 PheValAspLeuAspArgLeuArgArgArgSerArgSerArgSerSerAsnGlyLeu 39
Db 52 GTCGCGGATCTCGACAGGCTCCACCGTCGTAATCGAGTTCGGATTCTTCAACCGGACTC 111
Qy 40 LeuLeuSerGlySerAspAsnAsnSerProSerAspValGlyValAlaProAlaAspVal 59
Db 112 CTC-----TCGATACCTCCCGCTCGGAGCGATGTTGGAGCTCGCGCGCGCGAA 159
Qy 60 ArgAspArgIleAspSerValValAsnAspAlaGlnGlyThrAlaAsnLeuAlaGly 79
Db 160 AGGATCGGGTGTATTCGCTCGCGAGGAGGAGGCTCAGGAAACAGCGAATTTAGCT---216
Qy 80 AspAsnAsnGlyGlyGlyAspAsnAsnGlyGlyArgGlyGlyGlyGlyGlyGlyGly 99
Db 217 -----GGCGGAGATGCCGAACACTAGGGAATCCGCGGAGGC-----252
Qy 100 AsnAlaAspAlaThrPheThrArgProSerValProAlaHisArgArgAlaArgGlu 119
Db 253 -----GATGTAAGTTTACGTATCCAGCGTCGTTCCASCTCATCCGAGGAGGAGG 306
Qy 120 SerProLeuSerSerAspAlaIlePheLysGlnSerHisAlaGlyLeuPheAsnLeuCys 139
Db 307 AGTCCTCTCAGCTCGAGCTATCTTCAACCAAGCCATGCAGGATTTGTTCAACCTCTGT 366
Qy 140 ValValValLeuLeuAlaValAsnSerArgLeuIleIleGluAsnLeuMetLysTyrGly 159
Db 367 GTAGTTGTCTTGTGTCTTTAACAGTAGACTCATCATCGAAAACTCATGAAGTATGCT 426
Qy 160 TrpLeuIleArgThrAspPheThrPheSerArgSerLeuArgAspTrpProLeuPhe 179
Db 427 TGGTTGATCAGACACTGATTTTGGTTTGTATCTATCATCTTACGAGACTGGCGGCTTTTC 486
Qy 180 MetCysCysIleSerLeuSerIlePheProLeuAlaAlaPheThrValGluLysLeuVal 199
Db 487 ATGTGTTGTCTTCACTTTCGCTCTTCTTGGCTGCTTTCACCGTTCGAGAAAAATGTA 546
Qy 200 LeuGlnLysTyrIleSerGluProValIlePheLeuHisIleIleLeuThrMetThr 219
Db 547 CTCAGAACTCATATCTGAGCGCTGTGCGCATCTTCTCATGTCTATATAACCAATGACA 606
Qy 220 GluValLeuTyrProValTyrValThrLeuArgCysAspSerAlaPheLeuSerGlyVal 239
Db 607 GAGGCTTGTATCCAGTCTACGTACACTGAGGTGTGATCTCGCTCTTGTTCAGGTGTC 666
Qy 240 ThrLeuMetLeuLeuThrCysIleValTrpLeuLysLeuValSerTyrAlaHisThrSer 259
Db 667 ACCTGTATGCTGCTCCTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 726
Qy 260 TyrAspIleArgSerLeuAlaAsnAlaAlaAspLysAlaAsnProGluValSerTyrTyr 279
Db 727 TACGACATAAGAACCCCTGCCAAATTCAGCTGTAAGGTGCTGCTGCTGCTGCTGCTGCT 786
Qy 280 ValSerLeuLysSerLeuAlaTyrPheMetValAlaProThrLeuLeuCysTyrGlnProSer 299

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Db 787 GTTAGCTTGAAGAGCTTGGCGTATTTCATGGTGTCTCCCACTGTGTATCAGCAAGC 846
Qy 300 TyrProArgSerAlaCysIleArgLysGlyTrpValAlaArgGlnPheAlaLysLeuVal 319
Db 847 TATCCACGTTTCCATGTATCCGAAGGGTTGGTGGCTCGTCAACTTGCACAAACTGGTC 906
Qy 320 IlePheThrGlyPheMetGlyPheIleIleGluIleTyrIleAsnProIleValArgAsn 339
Db 907 ATATTCACTGGACTCATGGGATTTATAATAGAGCAATATATAATCTTATTGTAGGAAC 966
Qy 340 SerLysHisProLeuLysGlyAspLeuLeuTyrAlaIleGluArgValLeuLysLeuSer 359
Db 967 TCAAGACATCTCTGAAGGGGACCTCTATATGCTATTGAAGAGTGTGTGAAGCTTTCA 1026
Qy 360 ValProAsnLeuTyrValTrpLeuCysMetPheTyrCysPhePheHisLeuTrpLeuAsn 379
Db 1027 GTTCCAAATCTATATGTGTGGCTCTGCATGTTCTACTGCTTCTTCCACCTTGGTTAAAC 1086
Qy 380 IleLeuAlaGluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTrpTrpAsnAla 399
Db 1087 ATATTGGCAGAGCTCTCTGCTTCGGGACCGGTGAATTTTACAAAGATTGGTGAATGCA 1146
Qy 400 LysSerValGlyAspTyrTrpArgMetTrpAsnMetProValHisLysTrpMetValArg 419
Db 1147 AAACGCTTGGAGATTATTGGAGATGTGAATATGCTGTTTCACAAAATGGATGGTTCGA 1206
Qy 420 HisIleTyrPheProCysLeuArgSerLysIleProLysThrLeuAlaIleIleAla 439
Db 1207 CATGTATATCTTTCCGTGCTGCGCATCAAGATACCAAAAGTACCCGCCATTATCATGCT 1266
Qy 440 PheLeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheLys 459
Db 1267 TTCTTAGTCTCGAGTCTTTTCATGAGTTATGATCGAGTTCCTTGGCGTCTCTTCAAT 1326
Qy 460 LeuTrpAlaPheLeuGlyIleMetPheGlnValProLeuValPheIleThrAsnTyrLeu 479
Db 1327 CTATGGGCTTTCATGGGAATTATGTTTTCAGGTCCTTTCGCTTATATCAAAACTTTTAA 1386
Qy 480 GlnGluArgPheGlySerThrValGlyAsnMetIlePheThrPheIlePheCysIlePhe 499
Db 1387 CAAGAAAGGTTTGGCTCCATGGTGGGAAACATGATCTTTGGTTCAGCTTCTTGCATTTTC 1446
Qy 500 GlyGlnProMetCysValLeuLeuTyrTyrHisAspLeuMetAsnArgLysGlySerMet 519
Db 1447 GACAAACCGATGTGGGCTTCTTTATACATGACTGATGAAACCGAAAGATCCATG 1506
Qy 520 Ser 520
Db 1507 TCC 1509

RESULT 5
US-10-223-076-10
; Sequence 10, Application US/10223076
; Publication NO. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Rarese, Robert V
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; FILE OF INVENTION: Uses Thereof
; FILE REFERENCE: UCAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24

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; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows version 4.0
; SEQ ID NO 1C
; LENGTH: 2090
; TYPE: DNA
; ORGANISM: Trophaeolum majus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (17)..(1727)
US-10-223-076-10

Alignment Scores:
Pred. No.: 5,77e-203 Length: 2090
Score: 1880.00 Matches: 370
Percent Similarity: 78.11% Conservative: 44
Best Local Similarity: 69.81% Mismatches: 88
Query Match: 67.85% Indels: 28
DB: 5 Gaps: 10

US-09-623-514A-2 (-520) x US-10-223-076-10 (1-2090)

QY 1 MetAlaIleuAspSerAlaGlyValThrThrValThrGluAsnGlyGlyGluPhe 20
DB 171 ATGGCGGTGCGAGAGCGTCACAGAACACAGACA---ACCATGAGTGGTCACGGCGAC--- 224
QY 21 ValAspLeuAspArgLeuArgAlaGlySerArgSerAsp-----SerSer 36
DB 225 TCGGATCTCAACAAATTCGCTAGAGGAACACCGAGTCTCCGCTGATTGAACCTTGCTG 284
QY 37 AsnGlyLeuLeuSerGlySerAspAsnAsnSerProSerAspValGlyAlaPro 56
DB 285 TCCGGTTTACA-----TCCACCAATGGCGTACCGCG-----ACTGGCCACGCTG 329
QY 57 AlaAspValArgAspArgIleAspSerValValAsnAspAspAlaGlnGlyThrAlaAsn 76
DB 330 GCTGAGAAATCGTGACAGAGATCGGGTAGGGGCTATGGAGAACCAACAGGATCGGTCAAC 389
QY 77 LeuAlaGlyAspAsnAsnGlyGlyGlyAspAsnAspGlyGlyGlyGlyGlyGlu 96
DB 390 TTAATTTGGA-----AATGCTGGAGCGTGTATCGGGAATGAA 428
QY 97 GlyArg-----GlyAsnAlaAspAlaThrPheThrThrArgProSerValProAlaHis 114
DB 429 GAGAAACAGTACGGGAGAGACTGATATACGATTCACCTACCGGCTTCGTTTCGGGCTCAT 488
QY 115 ArgArgAlaArgGluSerProLeuSerSerAspAlaIlePheLysGlnSerHisAlaGly 134
DB 489 CGGAGGGTGGGGAGAGTCTCTTAGCTCTGATGCAATCTTCAACAGAGCCCATCGCGGT 548
QY 135 LeuPheAsnLeuCysValValValLeuIleAlaValAsnSerArgLeuIleIleGluAsn 154
DB 549 TTATTCAACTCTGTGTATAGTGTGCTCAATTCAGTAAACAGTAGGCTTATCATCGAATAAT 608
QY 155 LeuMetLysGlyGlyTrpLeuIleArgThrAspPheTrpPheSerSerArgSerLeuArg 174
DB 609 CTTATGAAGTATGGTTGGTTGATCGATCTAGTCTGTTCTGTTTAAACAGATCACTGGGT 668
QY 175 AspTrpProLeuPheMetCysCysIleSerLeuSerIlePheProLeuAlaIlePheThr 194
DB 669 GATGTGTCATCTTATGCTGTCTATACACTCCCAATTTCCCACTTGTGCTGTCTTATTTAT 728
QY 195 ValGluLysLeuValLeuGlnLysTrpIleSerGluProValValIlePheLeuHisIle 214
DB 729 GTTGAAAGCTGGTCAGCGAATATATATATGAACTTGTGCTGTCTCTTCCTTCATGTA 788
QY 215 IleIleThrMetThrGluValLeuLeuValProValTrpValThrLeuArgCysAspSerAla 234
DB 789 ATCGATTTCACCGCTCCAGTTTATATCCAGTTATTGTGATCTTAAACGTTGATTCGGGT 848
QY 235 PheLeuSerGlyValThrLeuMetLeuLeuThrCysIleValTrpLeuLysLeuValSer 254
DB 849 TATATGCTGGTGGTATGATGCTCTTGTGTTGATATATGTTGAGTGGTGGTGTCA 908

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QY 255 TyrAlaHisThrSerTyAspIleArgSerLeuAlaAsnAlaAlaAspLys-----Ala 272
DB 309 TATGCACTACTAGTTCTGTATATTAGACACTGGCCAAATCTGGCTATAGGGGATCGG 968
QY 273 AsnPro-----GluValSerTyTrpValSerLeuLysSerLeuAlaTyr 287
DB 969 CACCCCAATTCACCACTTGTGAGTTGCTCATATGATGTAGCTTGAAGAGATTGGCATAC 1028
QY 288 PheMetValAlaProThrLeuCysTyTrpGlnProSerTyTrpProArgSerAlaCysIleArg 307
DB 1029 TTCATGGTGGCGCGACATTATGTTACCGCTAGCTATCTCTGCTGCTGTATCCGC 1088
QY 308 LysGlyTrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMetGlyPhe 327
DB 1089 AAGGGTGGGTGCTGCTCAATTTGTCAAACTAATAGTTTTCATAGACTCATCGGGTTC 1148
QY 328 IleIleGluGlnTrpIleAsnProIleValArgAsnSerLysHisProLeuLysGlyAsp 347
DB 1149 ATTATAGAACATATATATATCTCTGTTTCGAAATTCCAACACCCCATTTGAAAGAGAT 1208
QY 348 LeuLeuTyAlaIleGluArgValLeuLysLeuSerValProLeuLeuTyValTrpLeu 367
DB 1209 TTTTATATGCAATAGAGAGAGTTTGAAGCTTTCAGTCCAAATCATATAGTTTGGCTT 1268
QY 368 CysMetPheTyTrpCysPhePheHisLeuTrpLeuAsnIleLeuAlaGluLeuLysCysPhe 387
DB 1269 TGCATGCTTCTACTCTTTTTCACCTCTGCTGTAACATATCTGGCTGAGCTTCTTCGCTTT 1328
QY 388 GlyAspArgGluPheTyTrpLysAspTrpTrpAsnAlaLysSerValGlyAspTyTrpArg 407
DB 1329 GGTGATCGTGAATCTACAAAGATGTGTGAATTCGCAAAACTGTTCGGAGTATTGAAA 1388
QY 408 MetTrpAsnMetProValHisLysTrpMetValArgHisIleTyTrpPheProCysLeuArg 427
DB 1389 ATGTGGAATATGCTGTTTCAATGATGAGTGTGCTGCTCATATATTTTCTCTGTTGAGG 1448
QY 428 SerLysIleProLysThrLeuAlaIleIleAlaPheLeuValSerAlaValPheHis 447
DB 1449 AATGGCATACCCCAAGGAGGTGCCATTATTATCGGTTCTTAGTTCTGGTGTCTTCCAT 1508
QY 448 GluLeuCysIleAlaValProCysArgLeuPheLysLeuTrpAlaPheLeuGlyIleMet 467
DB 1509 GAGCTCTGCATTCGAGTCTCTTCCAGTATTCAAGTATTGGGCTTATAGGCATTATG 1568
QY 468 PheGluValProLeuValPheIleThrAsnTyTrpLeuGlnGluArgPhe---GlySerThr 486
DB 1569 TTTCAAGTCCCTTGGTGTATGATGCAATATATATACAGAAAGTTCAGTAATCTTATG 1628
QY 487 ValGlyAsnMetIlePheTrpPheIlePheCysIlePheGlyGlnProMetCysValLeu 506
DB 1629 GTGGCAATATGATCTTCTGTTCACTCTGTCATATCTGTCATCTGTCACCAACCTATGTGTGCTT 1688
QY 507 LeuTyTrpHisAspLeuMetAspArgLys 516
DB 1689 CTATATACCATGACCTGATAAATCTAAAG 1718

RESULT 6
US-10-223-076-14
; Sequence 14, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; FILE OF INVENTION: Uses Thereof
; FILE REFERENCE: USAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771

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; PRIOR FILING DATE: 1998-11-09
 ; PRIOR APPLICATION NUMBER: PCT/US98/17883
 ; PRIOR FILING DATE: 1998-08-28
 ; PRIOR APPLICATION NUMBER: 09/103,754
 ; PRIOR FILING DATE: 1998-06-24
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: FASTSEQ for Windows Version 4.0
 ; SEQ ID NO 14
 ; LENGTH: 1964
 ; TYPE: DNA
 ; ORGANISM: Piralla frutescens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (69)...(1673)
 ; US-10-223-076-14

Alignment Scores:
 Pred. No.: 4,73e-200 Length: 1964
 Score: 1854.00 Matches: 359
 Percent Similarity: 74.18% Conservative: 49
 Best Local Similarity: 65.27% Mismatches: 92
 Query Match: 66.91% Indels: 50
 DB: 15 Gaps: 9

US-09-623-514A-2 (1-520) x US-10-223-076-14 (1-1964)

QY 1 MetAlaIleLeuAspSerAlaGlyValThrValThr-----GluAsnGly 16
 DB 69 ATGGCGATCTTGGACTCGCGAGATCTGGACACGAGCGTGTCCAGTGGCGGACAAACGGC 128
 QY 17 GlyGlyGluPheValAspLeuAspArgLeuArgArgArgLysSerArgSerAspSerSer 36
 DB 129 GCGGCACATCACACCATCTTT-----CGCCGGAGACAAAGTGGCGCTCCGCTCCGCT 182
 QY 37 AsnGlyLeuLeuSerGlySerAspAsnAsnSerProSerAspValGlyAlaPro 56
 DB 183 -----CTTCTCGACTCGGATTCGAACCTCTCTG----- 209
 QY 57 AlaAspValArgAspArgIleAspSerValValAsnAsp-----AspAlaGlnGlyThr 74
 DB 210 -----GAGGCGAGAGAGCGCAATCAATGATTCGGAATAATGTTTCGAAACGAC 254
 QY 75 AlaAsnLeuAlaGlyAspAsnAspGlyGly----- 84
 DB 255 GCTAATTGTATCGAAATCTCCGCGCGAGGCCGCTGGATCCGAGAACGAAACAGAG 314
 QY 85 -----GlyAspAsnAsnGly-----GlyGlyArgGlyGlyGly 96
 DB 315 AGTTATGTTAAGGAGGAGGGGGCGAAAGTGAAGGAGAAATGGAGAAACTAGTAATGGCAAC 374
 QY 97 GlyArgGlyAsnAlaAspAlaThrPheThrTyrArgProSerValProAlaHisArgArg 116
 DB 375 GGAACGATGATGTTATGGCGGTCAAAATTCACATTCAGGCGCGCGCTGTCTCACCGCAA 434
 QY 117 AlaArgGluSerProLeuSerSerAlaIlePheLysGlnSerHisAlaGlyLeuPhe 136
 DB 435 AATAAGAGAGTCTCTTAGCTCCGAGGCCATCTTCAACAGAGCCATGCAAGGCTCTTC 494
 QY 137 AsnLeuCysValValValLeuIleAlaValAsnSerArgLeuIleGluAsnLeuMet 156
 DB 495 AACCTTTGTATAGTGGTCTTGTGCTGTAATAAGCAGACTAATAATTTGAAATTTAATG 554
 QY 157 LysTyrGlyTrpLeuIleArgThrAspPheTrpPheSerSerArgSerLeuArgAspTrp 176
 DB 555 AAGTATGGGTGGTATCAATACAGATTTTGGTTAGTTCAACATCGCTTAGGATGG 614
 QY 177 ProLeuPheMetCysCysIleSerLeuSerIlePheProLeuAlaAlaPheThrValGlu 196
 DB 615 CCATGCTAATAGTGTGTGTAGTCTTCACGATTTTTCACATCGCTTCATTTCTGTGAG 674
 QY 197 LysLeuValLeuGlnLysTyrIleSerGluProValValIlePheLeuHisIleIle 216
 DB 675 AAGTGTGGTGAACATAAATATATACCTGAGTGGGTGGCGAGTCTTCTTCATGTTACAACT 734

QY 217 ThrMetThrGluValLeuTyrProValTyrValThrLeuAlaCysAspSerAlaPheLeu 236
 DB 735 ACAACAGTSGAAATCTTGTTCAGATTTGTTCATCTTAGGTGATGATCTCTGCTGTTCA 794
 QY 237 SerGlyValThrLeuMetLeuLeuThrCysIleValTrpLeuLysLeuValSerValAla 256
 DB 795 TCAGGTGTACGCTAATGCTCTTTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 854
 QY 257 HisThrSerTyrAspIleArgSerLeuAlaAsnAlaAlaAspLys----- 271
 DB 855 CATACAACTATGATTTGAGAGTACTTCGCAAAATCACTTGATAAGTGGAGCTATGCTCC 914
 QY 272 -----AlaAsnProGluValSerTyrValSerLeuLysSerLeuAlaTyrPheMet 289
 DB 915 AGGTACTGGAACTCGACTACGCTTATGATGTAAGCTTTAAGAGTCTGGCATACTTCATG 974
 QY 290 ValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAlaCysIleArgLysGly 309
 DB 975 GTTGTCTCTCATATTGTTTACCGCAAGCTACCTCGACAGCTTGCATTCGGAAGGT 1034
 QY 310 TrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMetGlyPheIleIle 329
 DB 1035 TGGGTGGTAAAGCAACTAATTAAGCTGCTAATATTACAGGACTCATGGGATTTATTATA 1094
 QY 330 GluGlnTyrIleAsnProIleValArgAsnSerLysHisProLeuLysGlyAspLeuLeu 349
 DB 1095 GAACAGTACATAAACCCTGCTTCAAAATTTCTCAACATCTCTCAAGAGAAACCTTTTA 1154
 QY 350 TyrAlaIleGluArgValLeuLysLeuSerValProAsnLeuTyrValTrpLeuCysMet 369
 DB 1155 TATGCCATTGAGAGGTCTTGAAGCTTCTGTTCCAAAATTTATATATGTGTGGCTCTGCATG 1214
 QY 370 PheTyrCysPhePheHisLeuTrpLeuAsnIleLeuAlaGluLeuLeuCysPheGlyAsp 389
 DB 1215 TTTTATGTTTTCACCTCTGGCTAATAATATCTGTCTGAACITCTGTGCTTTGGGAC 1274
 QY 390 ArgGluPheTyrLysAspTrpTrpAsnLysSerValGlyAspTyrTrpArgMetTrp 409
 DB 1275 CGTGAATTTTATAGGATTTGGGAATCGGAGCAGAGTGGAGGAGTACTGGGAATGTGG 1334
 QY 410 AsnMetProValHisLysTrpMetValArgHisIleTyrPheProCysLeuArgSerLys 429
 DB 1335 AATATGCTGTTCATAAATGATGCTGTGSCATATATATCTGCCATGCTTACAAAATGGA 1394
 QY 430 IleProLysThrLeuAlaIleIleAlaPheLeuValSerAlaValPheHisGluLeu 449
 DB 1395 ATACCAAGATAGTGGCAGTTTGTATCGCTTCTTGTGTCTGCGATTTTTCATGAGCTG 1454
 QY 450 CysIleAlaValProCysArgLeuPheLysLeuTrpAlaPheLeuGlyIleMetPheGln 469
 DB 1455 TCGTGTGAGTCCCTTGTCCAAATATTCAAGTTTGGGGGTCTCGGGTATCATGCTTCAG 1514
 QY 470 ValProLeuValPheIleThrAsnTyrLeuGlnGluArgPhe---GlySerThrValGly 488
 DB 1515 GTTCTCTCGTAATCGTGACTAATTTACTTGCAGAGAAAGTTCAAAACTCAATGTGTGGC 1574
 QY 489 AsnMetIlePheTrpPheIlePheCysIlePheGlyGlnProMetCysValLeuLeuTyr 508
 DB 1575 AATATGATGTTCTGCTGCTTCTTCTGATCTTGTGTCACCATGTTGTGTGTGTCTGTAC 1634
 QY 509 TyrHisAspLeuMetAsnArgLysGlySer 518
 DB 1635 TACCACGACTTGATGAAATCGAANAACCTAGT 1664

RESULT 7

US-10-425-114-10163
 ; Sequence 10163, Application US/10425114
 ; Publication No. US:0040034888A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Liu, Jingdong
 ; APPLICANT: Zhou, Yihua
 ; APPLICANT: Kovalic, David K.


```

US-10-223-076-12
? Sequence 12, Application US/10223076
? Publication No. US20030074695A1
? GENERAL INFORMATION:
? APPLICANT: Farese, Robert V
? APPLICANT: Cases, Sylvaine
? TITLE OF INVENTION: Plant Diacylglycerol
? TITLE OF INVENTION: Uses Thereof
? FILE REFERENCE: UCAL-105C1P3
? CURRENT APPLICATION NUMBER: US/10/223
? CURRENT FILING DATE: 2001-10-29
? PRIOR APPLICATION NUMBER: 10/040,311
? PRIOR FILING DATE: 2001-10-29
? PRIOR APPLICATION NUMBER: 09/339,477
? PRIOR FILING DATE: 1993-06-29

```


; OTHER INFORMATION: n = any nucleotide
US-10-260-238-310

Alignment Scores:

Pred. No.:	3.65e-142	Length:	1150
Score:	1342.00	Matches:	272
Percent Similarity:	75.18%	Conservative:	40
Best Local Similarity:	65.54%	Mismatches:	56
Query Match:	48.43%	Indels:	49
DB:		Gaps:	8

US-09-623-514A-2 (1-520) x US-10-260-238-310 (1-1150)

	QY	ProAHisArgArgAlaArgGluSerProLeuSerSerAspAlaAlaIlePheLysGlnSer	131
:12	DB	CGNGCCNACGCCGCCTCAGGGAGAGCCCCCTCAGCTCCGAGCCATCTTCGCCAGAGC	63
	QY	HISAlaGlyLeuPheAsnLeuCysValValValLeuIleAlaValAsnSerArgLeuIle	151
132	DB	CATGCAGGCCCTTCTGAACCTATGCATTGTGTGCTGGTTGCTGTGAACAGCACCTATT	123
	QY	IleGluAsnLeuMetLys-TyrGlyTrpLeuIleArgThrAspPheTrpPheSerSerAr	171
152	DB	ATTGAGAATTATAATGAAGGTATGGCTACTAAATAGAGCTGGCAATTGTGTTTAGTGGAAC	183
	QY	gSerLeuArgAspTrpProLeuPheMetCysCysIleSerLeuSerIlePheProLeuAl	191
171	DB	ATCCTGGCAGATTGGCCCTCTCTCATGTGCTGCCTC-ACCTTACCACAATTTCCCCTTC	242
:84	QY	aAlaPheThrValGluLysLeuValLeuGlnAlaLysTyrlieSerGluProValValIlePh	211
191	DB	TGCACCTATTGCTCAGAGAAGTTGGCTCAAAGAAAACCTATTAGTAATA-----CA	290
	QY	eLeuHisIleIleIleThrMetThrGluValLeuTyrProValTyrValThrLeu--Arg	230
211	DB	TCCTCCATATGTTAATCAACATCTGCTCTTGTCTCATCCAGTTGTGTGATCTCAAAGG	350
	QY	CysAspSerAlaPheLeuSerGlyValThrLeuMetLeuLeuThrCysIleValTrpLeu	250
231	DB	TGTGATTCCSCAGTATTATCTGGATTGTGTGTGATGTTCTTCGAAGCATATTATTGSITG	410
	QY	LysLeuValSerTyraAhisThrSerTyrraspIleArgSerLeuAlaAsnAlaAlaSep	270
251	DB	AAGCTTCTTTCTTTTGTGCTCATACAAATATGATATAGAAATGCTCTCCAAGAAATTTGAA	470
	QY	LysAlaAsnProGluValSerTyrrValSerLeuLysSerLeuAlaTyrrPheMetVal	290
271	DB	AAG-----TTTTAAGGCTATCTCTACTTCACTGTTG	500
	QY	AlaProThrLeuCysTyr--GlnProSerTyrrProArgSerAlaCysIleArgLysGly	309
291	DB	GCCCCAACACTTCTCTACCAGCAGCCAAAGTTATCCCGAACCTACATATATTAGAAAAAGT	560
	QY	TrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMetClyPheIleIle	329
310	DB	TGGTGTGTGCGACAACTGATAAAATGCCTTGTTTTTACAGGCTTCATGGGTTTATAATT	620
	QY	Glu-----GinTyrlieAsnProIleValArgAsnSerLysHisProLeuLys	345
330	DB	GAGCAATTTATTTTTCAGTACATAAATCCAAATTGTGAAGNAITTCGAAGCATCCATTGAAA	680
	QY	GlyAspLeuLeuTyrrAlaIleGluArgValLeuLysLeuSerValProAsnLeuTyrrVal	365
346	DB	GGGAATTTCTTGAA TGCTATATAGAGAGATATTGAAATTTATCATGTGCCAACATTATATGTC	740
	QY	TrpLeuCysMetPheTyrrCysPhePhehisLeuTyrrLeuAsnIleLeuAlaGluLeuLeu	385
366	DB	TGGCTTTGCATGTTCTACTGGTTTTTCCATCTCTCG-TTGAATATTCTCTGCTGAGCTCCCTC	799
	QY	CysPheGlyAspArgGluPheTyrrLysAspTrpTrpAsnAlaLysSerValGlyAspTyrr	405
386	DB	TGTTTTGGTGATCGTGAATTTCTCAAGGACCTGGTGAATGCCAAACAGTCTCAAGAG---	856

RESULT 12

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US-10-223-076-17
: Sequence 17, Application US/10223076
: Publication No. US20030074695A1
: GENERAL INFORMATION:
: APPLICANT: Farese, Robert V
: APPLICANT: Cases, Sylvaine
: TITLE OF INVENTION: Plant Diacylglycerol
: TITLE OF INVENTION: Uses Thereof
: FILE REFERENCE: UCAL-105CIP3
: CURRENT APPLICATION NUMBER: US/10/223,076
: CURRENT FILING DATE: 2001-10-29
: PRIOR APPLICATION NUMBER: 16/040,315
: PRIOR FILING DATE: 2001-10-29
: PRIOR APPLICATION NUMBER: 09/339,472
: PRIOR FILING DATE: 1999-06-23
: PRIOR APPLICATION NUMBER: 60/107,771
: PRIOR FILING DATE: 1998-11-09
: PRIOR APPLICATION NUMBER: PCT/US98/17883
: PRIOR FILING DATE: 1998-08-28
: PRIOR APPLICATION NUMBER: 09/103,754
: PRIOR FILING DATE: 1998-06-24
: NUMBER OF SEQ ID NOS: 17
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 17
: LENGTH: 1572
: TYPE: DNA
: ORGANISM: Zea mays
US-10-223-076-17

```

Alignment Scores:	9.08e-135	Length:	1572
Pred. No.:	1279.00	Matches:	232
Score:	65.50%	Conservative:	49
Percent Similarity:	54.08%	Mismatches:	69
Best Local Similarity:	46.16%	Indels:	79
Query Match:	15	Gaps:	3
DB:			

US-09-623-514A-2 (1-520) x US-10-223-076-17 (1-1572)

[illegible]

Db 121 GATCTGCTACTACTGTTTTCACATCTCTTTTACACATTTGAAATGTATATCCAGTG 180
Qy 226 TyrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThrLeuMetLeuLeuThr 245
Db 191 CTCGTGATCTTAAAGTGTGATCTCTGAGTTTATATCAGGCTTTGTGTGTATGTTTATGCC 240
Qy 246 CysIleValTrpLeuLeuValSerTyrAlaHisThrSerTyrAspIleArgSerLeu 265
Db 241 TGCATTTGTTGGCTGAAGCTGTATCTTTTGACATACAAACCATGATATAGAAACCTG 300
Qy 266 AlaAsnAlaAlaAspLysAlaAspProGluValSer-----Tyr 278
Db 301 ATCAACGCGCAGAAGTTGATATGATGACTACCGCGGCTGGCATAGATATTTACNA 360
Qy 279 TyrValSerLeuLysSerLeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnPro 298
Db 361 GCTCCAACTCTTGGAGTCTAACATCTTCATGATGGCTCCGACACTCTGTATTCAGCCA 420
Qy 299 SerTyrProArgSerAlaCysIleArgLysGlyTrpValAlaArgGlnPheAlaLysLeu 318
Db 421 AGTTATCTCGAACACTTATGTTAGAAAGGTTGGCTGGCTCGCTCAAGTTATTTCTAC 480
Qy 319 ValIlePheThrGlyPheMetGlyPheIleIleGluSInTyrIleAsnProIleValArg 338
Db 481 TTGATATTTACTGCTCCAGGATTCATTTAGACATACATAAATCCTATTCTGTG 540
Qy 339 AsnSerIysHisProLeuLysGlyAspLeuLeuTyrAlaIleGluArgValLeuLysLeu 358
Db 541 AACTCTCAACATCCATTTGATGGAGGATTTACTGAATGCTGTAGACACTGTTTGAAGTC 600
Qy 359 SerValProAsnLeuTyrValTrpLeuCysMetPheTyrCysPhePheHisLeuTrpLeu 378
Db 601 TCATACCAATGCTACTCTGGCTTTGCGATGTTTATGCTTTTCCATCTGTGGTGA 660
Qy 379 AsnIleLeuAlaGluLeuLeuCysPheGlyAspArgGluPheTyrLysAspTrpTrpAsn 398
Db 561 AACATATCTGCTGAGATCTTCGATTTGCTGSCCGAGATTTCTCAAGACTGGTGGAT 720
Qy 399 AlaLysSerValGlyAspTyrTrpArgMetTrpAsnMetProValHisLysTrpMetVal 418
Db 721 GCAAAGACAAATGATGACTGCGAGAAAAGGAACATGCTGTGCATAAATGCAATGTT 780
Qy 419 ArgHisIleTyrPheProCysLeuArgSerLysIleProLysThrLeuAlaIleIleIle 438
Db 781 CGTCATATATATTTTCTTGATGCGAAATGGTATATCAAGAAAGTGTCTGTTTTTATA 840
Qy 439 AlaPheLeuValSerAlaVal-Phe----- 446
Db 841 TCGTTCCTTTGTTCTGCTGCTACTTCATGAGTGAACCTTATTTTACTTTTTCACCTTC 900
Qy 446 ----- 446
Db 901 GCATATATTAATTATATAGTTCTCTATTTTCAAATGTGCTCTTCGAGTTTCGACATGCT 960
Qy 446 ----- 446
Db 961 TTTGTTCAAACCTTACCAGCTGTAGATTACTTGGATGAAGTGTCTATATATAAATTCATA 1020
Qy 447 -----HisG 448
Db 1021 TTTCACATCCAGTCCCTTTCGAGAAATTTATGATACATTTTGTGTTGATTTGTACCA 1080
Qy 448 uLeuCysIleAlaValProCysArgLeuPheLysLeuTrpAlaPheLeuGlyIleMetPh 468
Db 1081 GTTATGCGCTTCAGTTCCCTGCCATACACTCAAGTCTCGGGCTTCTTAGGAATCATGCT 1140
Qy 468 eGlnValProLeuValPheIleThrAsnTyrLeuGlnGluArgPheGlySerThr---Va 487
Db 1141 TCAGATTCCTCATATATTGACATCATCTCAAAATTAATTAATTCATGACACAAATGCT 1200
Qy 487 lGlyAsnMetIlePheTrpPheIlePheCysIlePheGlyGlnProMetCysValLeuLe 507

Db 1201 TGGCAATATGATCTTTTGGTTTTTTTCTGCATATACGGCAGCAATGTGTCTATT 1260
Qy 507 uTyrTyrHisAspLeuMetAsnArg 515
Db 1261 GTATTACCATGATGTGATGACCGG 1285
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US-10-223-076-16
? Sequence 16, Application US/10223076
? Publication NO. US20030074695A1
? GENERAL INFORMATION:
? APPLICANT: Paresse, Robert V
? APPLICANT: Cases, Sylvaine
? TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
? TITLE OF INVENTION: Uses Thereof
? FILE REFERENCE: UCAL-105CIP3
? CURRENT APPLICATION NUMBER: US/10/223,076
? CURRENT FILING DATE: 2001-10-29
? PRIOR APPLICATION NUMBER: 10/040,315
? PRIOR FILING DATE: 2001-10-29
? PRIOR APPLICATION NUMBER: 09/339,472
? PRIOR FILING DATE: 1999-06-23
? PRIOR APPLICATION NUMBER: 60/107,771
? PRIOR FILING DATE: 1998-11-09
? PRIOR APPLICATION NUMBER: PCT/US98/17883
? PRIOR FILING DATE: 1998-08-28
? PRIOR APPLICATION NUMBER: 09/103,754
? PRIOR FILING DATE: 1998-06-24
? NUMBER OF SEQ ID NOS: 17
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ ID NO 16
? LENGTH: 1181
? TYPE: DNA
? ORGANISM: Zea mays
? FEATURE:
? NAME/KEY: misc feature
? LOCATION: 235, 236, 237, 238, 239, 317, 318, 319, 320, 321, 322, 393,
? LOCATION: 394, 395, 396, 397, 398
? OTHER INFORMATION: n = A,T,C or G
US-10-223-076-16
Alignment Scores:
Pred. No.: 6,66e-111 Length: 1181
Score: 1067.50 Matches: 192
Percent Similarity: 79.71% Conservative: 28
Best Local Similarity: 69.57% Mismatches: 47
Query Match: 38.52% Indels: 9
DB: 15 Gaps: 3
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Qy 253 ValSerTyrAlaHisThrSerTyrAspIleArgSerLeuAlaAsnAlaAlaAspLys--- 271
Db 12 GTCTCTTATGCATACAAATTTATGATATAGGGTATTGTCCAAAGTACTGAGAGGT 71
Qy 272 -----AlaAsnProGluValSerTyrTyrValSerLeuLysSerLeu 285
Db 72 GCTGCAATGGAATTTATGCTGATATGCAATATGAAAGATCCAACTTTTAAAGTCTA 131
Qy 286 AlaTyrPheMetValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAlaCys 305
Db 132 GTGTACTTTCATGTGGCCCAACACTTTGTTTACCAGCACTTATCTCTCAAACTACATCT 191
Qy 306 IleArgLysGlyTrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPheMet 325
Db 192 ATTAGAAAGGGTGTGGGTGACCCAGCAACTCAFAAAAGTGGTGGNNNNNACAGGCTTGATG 251
Qy 326 GlyPheIleIleGluGlnTyrIleAsnProIleValArgAsnSerIysHisProLeuLys 345
Db 252 GCCTTCATATTGACCAATATATAACCAATTTGGAAGAAATTCAAACATCCACCTGAAA 311
Qy 346 GlyAspLeuLeuTyrAlaIleGluArgValLeuLysLeuSerValProAsnLeuTyrVal 365

312 GGGANNNNNGAATGCTATAGAAAGAGCTTTAAACACTCTCAGTGCACCAATTTATATGTA 371
 366 TrpLeuCysMetPheTyrCysPhePheHisLeuTyrPheAsnIleLeuAlaGluLeuLeu 385
 372 TGGCTTTCATGCTTCTATTGCTNNNNNCATTTATGGCTGAACATTTAGCTGAATCTCTC 431
 386 CysPheGlyAspArgGluPheTyrLeuAspTyrPheAsnAlaAlaLysSerValGlyAspTyr 405
 432 TGTTCGGTGAGCGTGAAATCTATAGAGACTGGTGGAAATGCCAAACTGTTGAGAGTAC 491
 406 TrpArgMetTrpAsnMetProValHisLysTyrMetValArgHisIleTyrPheProCys 425
 492 TGGAGGATGTGAACATGCTGTTTCATTAAGTGGATCATCAGACACATATATTTTCCATGT 551
 426 LeuArgSerLysIleProLysThrLeuAlaIleIleIleAlaPheLeuValSerAlaVal 445
 552 ATAAGGAAGAGCTTTTCCAGAGGCTGAGCTATTCTAATCTCGTTCTGTTTTCAGCTGA 611
 446 PheHisGluLeuCysIleAlaValProCysArgLeuPheLysLeuTyrAlaPheLeuGly 465
 612 TTCCATGAATATGATTTGGGTGGCGTGGCCACATTTTCAATCTCGGCATTTTCTGGG 671
 466 IleMetPheGluValProLeuValPheIleThrAsnTyrLeuGlnIleuArgPheGlySer 485
 672 ATCATGTTTCAGATACCGTTGGTATTCTTGACAAGATATCTCCATGCTACGTTTCAAGCAT 731
 486 Thr---ValGlyAsnMetIlePheTyrPheIlePheCysIlePheGlyGlnProMetCys 504
 732 GTAATGGTGGGCAACATGATATTTTGGTTC---TTCAGTATAGTCGGACAGCGCATGTGT 788
 505 ValLeuLeuTyrTyrHisAspLeuMetAsnArgLysGlySerMetSer 520
 789 GTCTCTCTATACTACCATGACGTGATGACAGAGCGAGCGCCCAAGT 836

RESULT 14

US-10-278-733-2
 ; Sequence 2, Application US/10278733
 ; Publication No. US20030100480A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Smith, Steven
 ; APPLICANT: Chen, Robert
 ; APPLICANT: Farese, Robert V Jr
 ; TITLE OF INVENTION: Methods and compositions for modulating
 ; TITLE OF INVENTION: sebaceous glands
 ; FILE REFERENCE: USAL-105CIP4
 ; CURRENT APPLICATION NUMBER: US/10/278, 733
 ; CURRENT FILING DATE: 2002-10-21
 ; PRIOR APPLICATION NUMBER: 10/040,315
 ; PRIOR FILING DATE: 2001-10-29
 ; PRIOR APPLICATION NUMBER: 09/339,472
 ; PRIOR FILING DATE: 1999-06-23
 ; PRIOR APPLICATION NUMBER: 60/107,771
 ; PRIOR FILING DATE: 1998-11-09
 ; PRIOR APPLICATION NUMBER: PCT/US98/17883
 ; PRIOR FILING DATE: 1998-08-28
 ; PRIOR APPLICATION NUMBER: 09/103,754
 ; PRIOR FILING DATE: 1998-06-24
 ; NUMBER OF SEQ ID NOS: 24
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 2
 ; LENGTH: 1467
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (1)...(1467)
 ; OTHER INFORMATION: Homo sapiens diacylglycerol O-acyltransferase
 ; OTHER INFORMATION: homolog 1
 US-10-278-733-2

Alignment Scores: 2.47e-79 Length: 1467
 Pred. No.: 791.50 Matches: 194
 Score:

Percent Similarity: 53.14% Conservative: 77
 Best Local Similarity: 38.04% Mismatches: 174
 Query Match: 28.56% Indels: 65
 DB: 15 Gaps: 17
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 DB 22 CGCGCGCGAGGACACAGGTGCGGCGCTCGAGCCACGCGCGC----- 63
 QY 45 AspAsnAsnSerProSerAspValGlyAlaProAlaAspValArgAspArgIleAsp 64
 DB 64 -----GGCGGCGCTGCGCGCGCGGAGAGAG----- 90
 QY 65 SerValValAsnAspAlaGlnGly---ThrAlaAsnLeuAlaGlyAspAsnAsnGly 83
 DB 91 -----GTGCGGACCGCGCTGCGGCGCGCGAGCGCGGCGCGCGCGCGCGC 144
 QY 84 GlyGlyAspAsnAsnGlyGlyGlyArgGlyGlyGlyGlyGlyGlyGlyGlyGlyGlyGly 103
 DB 145 CGGCG 204
 QY 104 ThrPheThrTyrArgProSerValProAlaHisArgAlaArgGluSerProLeuSer 123
 DB 205 -----CATCGCCTGCAGGATCTTTATTTCAGC 231
 QY 124 SerAspAlaIlePheLysGlnSerHisAlaGlyLeuPheAsnLeuCysValValValLeu 143
 DB 232 TCTGACATGGGCTTC---AGCACTACCGTGGGATCTCTGAACCTGGTGTGGTGTGATCTG 289
 QY 144 IleAlaValAsnSerArgLeuIleIleGluAsnLeuMetLysTyrGlyTyrLeuIleArg 163
 DB 289 ATCTTCAGCAATGCCCGTTATTCTTGGAGAACTCATCAAGTATGCGATCTCTGGTG--- 345
 QY 164 ThrAspPheTrpPheSerArgSerLeuArgAsp-----TrpProLeuPheMet 180
 DB 346 GACCCCATCCAGGTGGTTCCTCTGTTCTCTGAAGATCCCTATAGCTGGCGCGCCCATGC 405
 QY 181 CysCysIleSerLeuSerIlePheProLeuAlaAlaPheThrValGluLysLeuValLeu 200
 DB 406 CTGGTTATTTCGGCGCAATGCTTTTGTGTGGCTGTCATTCAGGTGAGAGCGCGCTCGCG 465
 QY 201 GlnLysTyrIleSerGluProValIlePheLeuHisIleIleIleThrMetThrGlu 220
 DB 466 GTGGGTGCCCTGACGAGGAGCGGCGGACTGCTGTCACCTGGCCACCTGGCCACCAT 525
 QY 221 ValLeuTyrProValTyrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThr 240
 DB 526 CTGTGTTTCCACGCGCTGTGTCTTACTGGTTGAGTCTATCACTCCAGTGGGCTCCCTG 585
 QY 241 LeuMetLeuLeuThr---CysIleValTrpLeuLysLeuValSerTyrAlaHisThrSer 259
 DB 586 CTGGCGCTGATGGCGCACACCATCTCTCTTCTCAAGCTCTTCTCTACCGC----- 636
 QY 260 TyrAspIleArgSer-----LeuAlaAsnAlaAlaAspLys 271
 DB 637 ---GACGTCACTCATGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 693
 QY 272 AlaAsnPro-----GluValSerTyr-----TyrValSerLeuLysSer 284
 DB 694 GCCAGCAGTGTCTGCTGCCCGCGCACACCGTGAGCTACCGCGACCAATCTGACCTACCGG 753
 QY 285 LeuAlaTyrPheMetValAlaProThrLeuCysTyrGlnProSerTyrProArgSerAla 304
 DB 754 CTCTACTACTTCTCTTTCG 813
 QY 305 CysIleArgLysGlyTrpValAlaArgGlnPheAlaLysLeuValIlePheThrGlyPhe 324
 DB 814 CGCATCGGAGCGCTTTCGTGCTGCGAGCGATCCTTGAGATGCTGTCTTTCACCGCGCTC 873
 QY 325 MetGlyPheIleIleGluGlnTyrIleAsnProIleValArgAsnSerLysHisProLeu 344

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OM nucleic - nucleic search, using sw model

Run on: May 5, 2004, 11:32:37 ; Search time 130.654 Seconds
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Gapop 15°C, Gapext 1.0

Searched: 632709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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6: /cgn2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	1839.4	96.6	1942	4	US-09-326-203A-1
2	1125.4	59.1	1512	4	US-09-593-359-3
3	954	50.1	1446	4	US-09-593-359-1
4	336.4	17.7	629	4	US-09-103-754A-3
5	141.8	7.4	1650	4	US-09-103-754A-2
6	141.2	7.4	1976	3	US-09-165-042-2
7	139.6	7.3	1895	4	US-09-326-203A-14
8	137.6	7.2	1766	4	US-09-326-203A-15
9	137.6	7.2	1765	4	US-09-326-203A-16
10	125.8	5.6	275	4	US-09-326-203A-5
11	122.6	6.4	234	4	US-09-326-203A-3
12	123.4	5.7	254	4	US-09-326-203A-8
13	109.4	5.7	254	4	US-09-313-294A-580
14	108.2	5.7	267	4	US-09-326-203A-4
15	123.6	5.4	262	4	US-09-326-203A-9
16	103.6	5.4	262	4	US-09-313-294A-1662
17	93	4.9	325	4	US-09-326-203A-7
18	68.4	3.6	325	4	US-09-326-203A-10
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21	57	3.0	4011	2	US-09-121-396-3
22	57	3.0	4011	5	PCT-US93-09704A-3
23	57	3.0	4079	1	US-08-121-057-2
24	57	3.0	4079	2	US-08-509-187D-2
25	57	3.0	4079	2	US-09-121-396-2
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27	55.8	2.9	519	4	US-09-326-203A-11

28 52.2 2.7 1607 4 US-09-328-857A-1 Sequence 1, Appli
29 51.6 2.7 7218 1 US-08-232-463-14 Sequence 14, Appl
30 50 2.6 1509 4 US-09-328-857A-2 Sequence 2, Appli
31 50 2.6 2040 3 US-09-165-042-4 Sequence 4, Appli
32 49 2.6 518 4 US-09-326-203A-12 Sequence 12, Appl
33 43 2.3 18596 3 US-09-318-448-11 Sequence 11, Appl
34 43 2.3 18597 4 US-09-962-665-8 Sequence 8, Appli
35 43 2.3 18597 4 US-09-963-333-8 Sequence 8, Appli
36 39.2 2.1 1664976 4 US-08-916-421B-1 Sequence 1, Appli
37 37.4 2.0 399 4 US-09-621-976-8976 Sequence 8976, Ap
38 36.4 1.9 288 4 US-09-119-507B-111 Sequence 111, App
39 36.4 1.9 288 4 US-09-547-693-111 Sequence 111, App
40 36.2 1.9 832 4 US-09-621-976-2813 Sequence 2813, Ap
41 36.2 1.9 834 4 US-09-621-976-2574 Sequence 2574, Ap
42 36.2 1.9 1813 4 US-09-620-312D-29 Sequence 29, Appl
43 36.2 1.9 3821 4 US-08-956-171B-304 Sequence 304, App
44 35.6 1.9 248 3 US-09-007-005-32 Sequence 32, Appl
45 35.6 1.9 248 3 US-09-244-796-32 Sequence 32, Appl

ALIGNMENTS

RESULT 1
US-09-326-203A-1
; Sequence 1, Application US/09326203A
; Patent No. 6444876
; GENERAL INFORMATION:
; APPLICANT: Laesner, Mike
; APPLICANT: Ruzinsky, Diane
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; TITLE OF INVENTION: Acid Sequences
; FILE REFERENCE: 17045/00/WO
; CURRENT APPLICATION NUMBER: US/09/326,203A
; PRIOR FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1942
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-326-203A-1

Query Match 96.6%; Score 1839.4; DB 4; Length 1942;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1840; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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99 ATTCTTAGCTTCTTCCCTCAATCCGCTCTTCCCTCTCCATAGATTCTGTTCTCTT 158
QY 61 TCATTCTTCTGCGATGCT 120
DB TCATTCTTCTGCGATGCT 218
QY 121 CGTCAAAACGCTTTTTCGAAATGCGGATTTTGGATTCTCTGCTGGCGTTTACTACGGTGACGGAG 180
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QY 181 AACGGTGCGGAGAGTTCTGTCGATCTTCTGATAGCTTCTGTCGCGGAAATCGAGATCGGAT 240
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QY 241 TCTTCTAACGAGCTTCT 300
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QY 301 GCTCCCGCGGACGTTTAGGGATCGGATTGATTCGGTGTGTTAAAGATGACGCTCAGGGAACA 360

Db 339 GCTCCGCGGAGCTTAGGATCGGATGATTCGGTTGTTAAAGATCAGCTCAGGGAACA 458
 QY 361 GCCAATTTGGCCGAGATAATAACCGTGGTGGCGATAATAACCGTGGTGGAGAGCGGC 420
 Db 459 GCCAATTTGGCCGAGATAATAACCGTGGTGGCGATAATAACCGTGGTGGAGAGCGGC 518
 QY 421 GGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 480
 Db 519 GGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 578
 QY 481 CGGAGGCGGAGAGAGAGTCCACTTAGCTCCGACGCAATCTTCAAAACAGAGCCATGCCGGA 540
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 QY 601 CTATGAGACTAGTGGTGGTGGATCAGAACGATTTCTGGTTTAGTTCAAGATCGCTGCGA 660
 Db 699 CTATGAGACTAGTGGTGGTGGATCAGAACGATTTCTGGTTTAGTTCAAGATCGCTGCGA 758
 QY 661 GATTTGGCCGCTTTTCATGTGTGTATATCCCTTTGATCTTTCTGATCTTTCTGGCTGCTTTACG 720
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 QY 721 GTTGAGAAATTTGGTACTTCAGAAATACATATCAGAACCTGTTGTCTATCTTTCTCATAT 780
 Db 819 GTTGAGAAATTTGGTACTTCAGAAATACATATCAGAACCTGTTGTCTATCTTTCTCATAT 878
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 Db 939 TTTTATCAGGTGTCACTTTGATGCTTCTCCTCCTGATTTGCTGCTTAAAGTTGGTTCT 998
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 QY 1021 TGTTATCAGCCAAAGTTATCCAGTTCTGATGTATACGGAAGGTTGGTGGCTCGTCAA 1080
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 Db 1299 GTGTTGAAGCTTTAGTCCAAATTTATATGTTGGCTGTGATGTTCTACTGCTCTTC 1358
 QY 1261 CACTTTGGTTTAAACATATGTCAGAGCTTCTGCTTGGGATCGTGAATCTCAAA 1320
 Db 1359 CACTTTGGTTTAAACATATGTCAGAGCTTCTGCTTGGGATCGTGAATCTCAAA 1418
 QY 1321 GATTTGGAATGCAAAAAGTGTGGAGATTTACTGGAAGATGTTGGAATATGCTGTTCAAT 1380
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 QY 1381 AAATGGATGTTTCAGATATATCTTTCCCGTCTTGGCAGGAGATACCAAGACACTC 1440
 Db 1479 AAATGGATGTTTCAGATATATCTTTCCCGTCTTGGCAGGAGATACCAAGACACTC 1538

QY 1441 GCATTATCATGCTTCTCTAGTCTCTGAGTCTTTTCATGAGCTATGCTAGGAGTTCTCT 1500
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 Db 1719 ATCTTCTGATTTTCGGAACACCGATGCTGTGCTTCTTATACCAACGACCTGATGAAC 1778
 QY 1681 CGAAAGGATCGATGTCATGAACAACTGTTCAAAAATGACCTTTCTCAAAATCTATG 1740
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 QY 1741 GCTCTGCTGATCTCCGTTGATGTTGCTGTTCTGATGCTTAAACGACCAATAGTGT 1800
 Db 1839 GCTCTGCTGATCTCCGTTGATGTTGCTGTTCTGATGCTTAAACGACCAATAGTGT 1858
 QY 1801 ATAAACCATTAAGAAAGAAAGAAATTTAGAGTTGTTGATC 1841
 Db 1899 ATAAACCATTAAGAAAGAAAGAAATTTAGAGTTGTTGATC 1939
 RESULT 2
 US-09-593-359-3
 ; Sequence 3, Application US/09593359
 ; Patent No. 6552250
 ; GENERAL INFORMATION:
 ; APPLICANT: Laroche, Andre J.
 ; APPLICANT: Kykforuk, Cory L.
 ; APPLICANT: Weselake, Randall J.
 ; TITLE OF INVENTION: Diacylglycerol O-acyltransferase
 ; FILE REFERENCE: 24015050
 ; CURRENT APPLICATION NUMBER: US/09/593,359
 ; CURRENT FILING DATE: 2000-06-14
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 1512
 ; TYPE: DNA
 ; ORGANISM: Brassica napus
 ; FEATURE:
 ; OTHER INFORMATION: DGAT1
 ; NAME/KEY: CDS
 ; LOCATION: (1)..(1512)
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 Best Local Similarity 84.5%; Pred. No. 0;
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 Db 1 ATGCGCATTTGATTTCTGAGGCGCTGCTGTACCOCGACGGAGAACGGCG-----TC 54
 QY 199 GTCGATCTTGATAGGCTTCGTCCGACGAAATCCAGATCCGATTCCTTAAACGACATTCCT 258
 Db 55 GCGATCTCGACAGGCTCCACCGTCTTAATCGAGTTCGATTTCTTCCACGACCTCTC 114
 QY 259 CTCTCTGTTCCGATATAATCTCTCTCGATGATGTTGGAGCTCCCGCGGACGTTAGG 318
 Db 115 TCGG-----ATCTTCCCGCTCGACGATGTTGGAGCTGCGGCGCGGCGAAAG 162
 QY 319 GATCGATGATTCGCTTGTATACGATGACGCTCAGGAACAGCCATTTGGCGGAGAT 378
 Db 163 GATCGGTTGATTCGCTCAGGAGGAGGCTCAGGGAACAGCGAATTTAGTGGCGGA 222

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QY 379 AATAACGGTGGTGGCGATATTAACGGTGGTGGAGAGGCGCGGAGAGGAGGAAAC 438
Db 223 GATCGCGAAACTAGGGAATCCGCGGAGG-----251
QY 439 GCCGATGCTACGTTTACGTATCGACCGTGGGTTCCAGTCTATCGGAGGGCGGAGAGAGT 498
Db 252 --CGATGTAAAGTTTACGTATCGACCGTGGGTTCCAGTCTATCGGAGGAGGAGAGT 309
QY 499 CCACTTAGCTCCGACGCAATCTTCAACAGAGCGCATGCCGGAATTTCAACCTCTGTGTA 558
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QY 739 CAGAAATACATATCAGAACCTGTTGTGATCTTCTTATATATATATATATATATATATAT 798
Db 550 CAGAAATACATATCAGAACCTGTTGTGATCTTCTTATATATATATATATATATATATATAT 609
QY 799 GTTCTGTATCCAGTTACGTCACCTAAGTGTGATCTGCTTTTATATATATATATATATATAT 858
Db 610 GTCTGTATCCAGTTACGTCACCTAAGTGTGATCTGCTTTTATATATATATATATATATATAT 669
QY 859 TTGATGCTCTCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 918
Db 670 TTGATGCTCTCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 729
QY 919 GACATAGATCCCTTAGCCATGAGCTGATAGAGCCATCTGAGTCTGCTGCTGCTGCTGCTGCT 978
Db 730 GACATAGATCCCTTAGCCATGAGCTGATAGAGCCATCTGAGTCTGCTGCTGCTGCTGCTGCTGCT 789
QY 979 AGCTTGAAGAGCTTGGCATATTTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1038
Db 790 AGCTTGAAGAGCTTGGCATATTTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 849
QY 1039 CCAGCTTCTGAGTATAGAGAGGTTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 1098
Db 850 CCAGCTTCTGAGTATAGAGAGGTTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 909
QY 1099 TTCACCGGATTCATGGGATTTATATAGAAACAATATATATATATATATATATATATATATAT 1158
Db 910 TTCACCGGATTCATGGGATTTATATAGAAACAATATATATATATATATATATATATATATAT 969
QY 1159 AAGCATCCTTTGAAGCGCATCTTCTATATATATATATATATATATATATATATATATATATAT 1218
Db 970 AAGCATCCTTTGAAGCGGACCTTCTATATATATATATATATATATATATATATATATATATAT 1029
QY 1219 CCAAAATATATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1278
Db 1030 CCAAAATATATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1089
QY 1279 TTGCGCAGGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1338
Db 1090 TTGCGCAGGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1149
QY 1339 AGTGTGGGAGATTAAGAGAAATGGAATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1398
Db 1150 AGGTTGGAGATTAAGAGAAATGGAATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1209
QY 1399 ATATATCTTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1458
Db 1210 GTATATCTTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1269
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QY 1459 CTAGTCTCTGCGAGTCTTTTCATGAGCTATGCTATGCGAGTTCCTTGTGCTCTCTTCAAGCTA 1518
Db 1270 TTAGTCTCTGCGAGTCTTTTCATGAGCTATGCTATGCGAGTTCCTTGTGCTCTCTTCAATCTA 1329
QY 1519 TGGGCTTTTCTTGGGATTTATGTTTTCAGGTGCTTTTGGTCTTTCATCACAACCTTATACAG 1578
Db 1330 TGGGCTTTTCTTGGGATTTATGTTTTCAGGTGCTTTTGGTCTTTCATCACAACCTTATACAA 1389
QY 1579 GAAGGTTTGGCTCAACGTTGGGAGACATGATCTTCTGGTCTTTCATCTTGGGATTTTGGG 1638
Db 1390 GAAGGTTTGGCTCAACGTTGGGAGACATGATCTTTCAGGTCTTTCATCTTGGGATTTTGGG 1449
QY 1639 CAACCGATGTTGTGCTCTTTCATCAGACCTGATGAACCGGAAAGGATCGATGTCA 1698
Db 1450 CAACCGATGTTGTGCTCTTTCATCAGACCTGATGAACCGGAAAGGATCGATGTCC 1509
QY 1699 TGA 1701
Db 1510 TGA 1512
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RESULT 3
US-09-593-359-1
; Sequence 1, Application US/09593359
; Patent No. 6552250
; GENERAL INFORMATION:
; APPLICANT: Iaroche, Andre J.
; APPLICANT: Nykiforuk, Cory D.
; APPLICANT: Weslake, Randall J.
; TITLE OF INVENTION: Diacylglycerol O-acyltransferase
; FILE REFERENCE: 24015050
; CURRENT APPLICATION NUMBER: US/09/593,359
; CURRENT FILING DATE: 2000-06-14
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1446
; TYPE: DNA
; ORGANISM: Brassica napus
; FEATURE:
; OTHER INFORMATION: DCAT2
; NAME/KEY: CDS
; LOCATION: (82)..(1107)
US-09-593-359-1

Query Match 50.1%; Score 954; DB 4; Length 1446;
Best Local Similarity 91.8%; Pred. No. 2.1e-281;
Matches 1019; Conservative 0; Mismatches 90; Indels 1; Gaps 1;

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QY 594 CGAAAACTCTATGATGATGTTGCTTCATCAGAAACGATTTCTGTTTAGTTTCAAGATC 653
Db 1 CGAAAACTCTATGATGATGTTGCTTCATCAGAAACGATTTCTGTTTAGTTTCAAGATC 60
QY 654 GCTCGAGATTTGGCGCTTTTCATGTTGTATATCCCTTTTGGATCTTCCCTTTGGCTGC 713
Db 61 GCTCGAGATT-GCGGCTTTTCATGTTGTGTTCTCTCCCTTTCAATCTTCTCTTGGCTGC 119
QY 714 CTTTACGTTTGGAGAAATGTTACTTCAGAAATACATATCAGAACTGTTGTCTCTTCT 773
Db 120 CTTTACGTTTGGAGAAATGTTACTTCAGAAATGATATCTGAACCTGTTGTCTCTTCT 179
QY 774 TCATATTATATACCATGACAGAGTTTTCATCAGTTTACGTTTACGTTTACGTTTGA 833
Db 180 TCATGTTATATACCATGACAGAGTTTTCATCAGTTTACGTTTACGTTTGA 239
QY 834 TTCTGCTTTTTCATCAGTTTTCATTTGATGCTCTCTCACTTGTGCTTGTGGCTAAAGTT 893
Db 240 TTCTGCTTTTTCATCAGTTTTCATTTGATGCTCTCTCACTTGTGCTTGTGGCTAAAGTT 299
QY 894 GGTTCCTTTCATCTACTAGCTATGATTAAGATTCCTAGCAATGCTGAGCTGATAAGGC 953
Db 300 GGTTCCTTTCATCTACTAGCTATGATTAAGAACCTAGCTAATTCATCTGATAAGGC 359
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QY 954 CAATCTGAGTCTCTACTAGTTAGTGTGAGAGCTGGCATATTTTCATGTCGTCC 1013
DB |||||
QY 360 CAATCTGAGTCTCTACTAGTTAGTGTGAGAGCTGGCTTATTTTCATGTCGTCC 419
DB |||||
QY 1014 CACATGTTGTTATCAGCCAAAGTTATCCAGTCTCTCATGTATACGGAAGGTTGGGTGC 1073
DB |||||
QY 420 CACATGTTGTTATCAGCCAAAGTTATCCAGTCTCTCATGTATCCGGAAGGTTGGGTGC 479
DB |||||
QY 1074 TCGTCATTTGCAAACTGGTTCATATTTCCAGGATTCATGGATTTAATAGACAATA 1133
DB |||||
QY 480 TCGTCATTTGCAAACTGGTTCATATTTCCAGTCTCTCATGTATTTAATAGACAATA 539
DB |||||
QY 1134 TATAATCTTATGTCAGAACTCAAGCATCTTTGAAAGCGATCTTCTATATGCTAT 1193
DB |||||
QY 540 TATAATCTTATGTCAGAACTCAAGCATCTCTGAAAGGGACCTTCTATATGCTAT 599
DB |||||
QY 1194 TGAAGAGTGTGAGAGCTTTCAGTCTTCCAAATTTATATGTGTGGCTCTGCACTTCTACTG 1253
DB |||||
QY 600 TGAAGAGTGTGAGAGCTTTCAGTCTTCCAAATCTATATGTGTGGCTCTGCACTTCTACTG 659
DB |||||
QY 1254 CTTCTTCCACCTTTGGTAAACATATTTGGCAGAGCTTCTCTGCTGGGGGATCGTAAT 1313
DB |||||
QY 660 CTTCTTCCACCTTTGGTAAACATATTTGGCAGAGCTTCTCTGCTGGGGGATCGTAAT 719
DB |||||
QY 1314 CTACAAAGATTCGTGGAATGCAAAAGTGTGGAGATTACTCGAGAAATGTGGAATATGCC 1373
DB |||||
QY 720 CTACAAAGATTCGTGGAATGCAAAAGTGTGGAGATTACTCGAGAAATGTGGAATATGCC 779
DB |||||
QY 1374 TGTTCATAAATGAGTGGTTCGACATATATATCTCCGTCCTTGGCAGCAAGATACCAA 1433
DB |||||
QY 780 TGTTCATAAATGAGTGGTTCGACATATATATCTCCGTCCTTGGCAGCAAGATACCAA 839
DB |||||
QY 1434 GACATCTGCCATATCATGCTTCTCTAGTCTCTGAGTCTTCTATGAGCTATGATCGC 1493
DB |||||
QY 840 AGTACCCGCCATATCATGCTTCTCTAGTCTCTGAGTCTTCTATGAGTATGATCGC 899
DB |||||
QY 1494 AGTTCCTTGTCTCTCTCAAGCATGAGCTTCTCTTGGGATATGTTTCAGTGTCTTT 1553
DB |||||
QY 900 AGTTCCTTGTCTCTCTCAATCTATGAGCTTCTATGGAATATGTTTCAGTGTCTTT 959
DB |||||
QY 1554 GGTCTTCATCAAAACTATCTACAGAAAGTGTGCTCAACGGTGGGAAACATGATCTT 1613
DB |||||
QY 960 GGTCTTCATCAAAACTTTTACAGAAAGTGTGCTCCATGGTGGGAAACATGATCTT 1019
DB |||||
QY 1614 CTGTTCTATCTCTGCAATTTGGACACCGATGCTGCTCTTATATACAGACCT 1673
DB |||||
QY 1020 TGGTTCAGCTTCTGCAATTTCCGACACCGATGCTGAGCTTCTTATATACATGACCT 1079
DB |||||
QY 1674 GATGAACCGAAAGGATGATGTCATGAA 1703
DB |||||
QY 1080 GATGAACCGAAAGGATGATGTCATGAA 1109
DB |||||
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RESULT 4

US-09-103-754A-3

; Sequence 3, Application US/09103754A

; Patent No. 6344548

; GENERAL INFORMATION:

; APPLICANT: Faresse, Robert

; APPLICANT: Cases, Sylvaine

; APPLICANT: Smith, Steven

; APPLICANT: Erickson, Sandra

; TITLE OF INVENTION: Diacylglycerol O-acyltran

; TITLE OF INVENTION: sferase

; NUMBER OF SEQUENCES: 6

; ADDRESS: Bozicevic & Reed

; STREET: 285 Hamilton Avenue, Suite 200

; CITY: Palo Alto

; STATE: CA

; COUNTRY: USA

; ZIP: 94301

; COMPUTER READABLE FORM:

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; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/103,754A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Field, Bret E
; REGISTRATION NUMBER: 37,620
; REFERENCE/DOCKET NUMBER: 6510-105p
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650 327 3400
; TELEFAX: 650 327 3231
; TELEX:
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INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 629 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA

US-09-103-754A-3

Query Match

Best Local Similarity 17.7%; Score 336.4; DB 4; Length 629;

Matches 381; Conservative 0; Mismatches 16; Indels 5; Gaps 3;

QY 1047 TGCATGATACCGAGAGGTTGGTGGCTGCTCAATTTGCAGAACTCTCAAGCATCC 1106

DB 1 TGCATGATACCGAGAGGTTGGTGGCTGCTCAATTTGCAGAACTCTCAAGCATCC 60

QY 1107 ATTCAATGGATTTATAAAGAAACAATATAAATCCTATTGTCAAGAACTCAAGCATCC 1166

DB 61 ATTCAATGGATTTATAAAGAAACAATATAAATCCTATTGTCAAGAACTCAAGCATCC 120

QY 1167 TTTGAAAGCGATCTCTATATGCTATTTGAAAGAGTGTGAAAGCTTTCAGTTCCAAATTT 1226

DB 121 TTTGAAAGCGATCTCTATATGCTATTTGAAAGAGTGTGAAAGCTTTCAGTTCCAAATTT 180

QY 1227 ATATCTGTGCTCTGATGCTCTGATGCTCTTCCACCTTTGTTAAACATATTTGCAGA 1286

DB 181 ATATGTGTGCTCTGATGCTCTGATGCTCTTCCACCTTTGTTAAACATATTTGCAGA 240

QY 1287 GCTTCTCTGCTTCGGGGATCGTGAATTTCTACAAAGATTTGTTGGAATGCAAAAGTGTGG 1346

DB 241 GCTTCTCTGCTTCGGGGATCGTGAATTTCTACAAAGATTTGTTGGAATGCAAAAGTGTGG 300

QY 1347 AGATTACT--GGAGAATGTGGAATATGCTGTTTCATAAATGG--ATGTTTCGACATATATA 1403

DB 301 AGATTACTGGAGAATGTGGAATATGCTGTTTCATAAATGGATGTTGTTGCAATATATA 360

QY 1404 C--TTCCCGTCTTCGACAGATACCAAGACACTGCC 1443

DB 361 CCTTCCCGTCTTCGACAGATACCAAGACACTGCC 402

RESULT 5

US-09-103-754A-2

; Sequence 2, Application US/09103754A

; Patent No. 6344548

; GENERAL INFORMATION:

; APPLICANT: Faresse, Robert

; APPLICANT: Cases, Sylvaine

; APPLICANT: Smith, Steven

; APPLICANT: Erickson, Sandra

; TITLE OF INVENTION: Diacylglycerol O-acyltran

; TITLE OF INVENTION: sferase

; NUMBER OF SEQUENCES: 6

```

CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/103,754A
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 6510-105p
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650 327 3400
TELEFAX: 650 327 3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1650 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-09-103-754A-2

Query Match 7.4%; Score 141.8; DB 4; Length 1650;
Best Local Similarity 54.3%; Pred. No. 6.4e-33;
Matches 309; Conservative 0; Mismatches 257; Indels 3; Gaps 1;

QY 997 TATTTCATGTCGCTCCACATTTGTTATCAGCAAGTTATCCAGTTCCTGCAATGATA 1056
DB 888 TACTTCATCTTGTCTCTACTTGTGTTATGAATCAACTTCTCTCGGTCCCGCAATA 947
QY 1057 CGGAAGGTTGGGTGGCTCGTCCTCAATTTGCAAACTGGTTCATATTCACCGATTTCATGGGA 1116
DB 948 CGAAGCGCTTTCGCTACGACGAGTCTCTGAGATGCTCTTTTACCCAGCTTCAAGTG 1007
QY 1117 TTTATAATAGAACATATATAAATCTATTTGCAGGAATCAAGCACTCTTTTGAAG-- 1174
DB 1008 GGGCTGATCCACAGTGGATGGTCCCTACTATCCAACTCCATGAAGCCCTTCAAGGAT 1067
QY 1175 -GCGATCTCTATATGCTATTGAAAGAGTGTGAAAGCTTCAGTTCCAAATTTATATGTG 1233
DB 1068 ATGGACTATTCCAGCATCATTTAGCGGTCTCTTAAAGCTGGCGGTCCCAACCATCTGATC 1127
QY 1234 TGGCTCTCATGTTCTACTGCTTCTTCCACCTTTGGTTAAACATATTCGACAGCTTCTC 1293
DB 1128 TGGCTTATCTTCTCTATTTGGTTTTTTCACCTCTGTCTCAATGCTGTGGCAGAGCTTCTG 1187
QY 1294 TGGTTCGGGGATCGTGAATTTCTACAAAGATTTGGTGAATGCAAAAGTGTGGGAGATTAC 1353
DB 1188 CAGTTTGGAGACCGGAGTTCTACAGAGATTTGGTGAATGCTGAGTCTGTACCTACTTT 1247
QY 1354 TGGGAATTTGGAATATGCTTTTCATATAATGGATGGTTGCAATATATATCTTCCCGTGC 1413
DB 1248 TGGCAGAACTGGAATATCCCGGTGCACAAAGTGTGTCATCAGACACTTCTACAAAGCTATG 1307
QY 1414 TTGGCAGCAGATACCAAGACACTCGGCATATCATCTTCTCTAGTCTCTGAGTCTCTGAGTC 1473
DB 1308 CTCAGACATGGCAGCAGCAAAATGGGTGGCCAGSACAGGAGTATTTTGGACCTTCAGCCTTC 1367
QY 1474 TTTTCATGAGCTATGCATCGCAGTTCCTTGTGCTCTCTTCAAGCTATGGGCTTTTCTTGGG 1533

CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/103,754A
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 6510-105p
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650 327 3400
TELEFAX: 650 327 3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1650 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-09-103-754A-2

Query Match 7.4%; Score 141.2; DB 3; Length 1976;
Best Local Similarity 54.2%; Pred. No. 1.1e-32;
Matches 309; Conservative 0; Mismatches 258; Indels 3; Gaps 1;

QY 937 TATTTCATGTCGCTCCACATTTGTTATCAGCCAGTATTCACGATTCAGTGTCTGCAATATA 1056
DB 1004 TACTTCTCTTTCGCCCCCACCCTTGTGTACGAGCTCAACTTTCCCGGCTCTCCCGCATC 1063
QY 1057 CGGAAGGTTGGGTGGCTCGTCAATTTGCAAACTGGTTCATATTCACCGATTTCATGGGA 1116
DB 1064 CGGAAGCGCTTCTCTCTGCGGACGATCTCTGAGATGCTCTTCTTCCACGATTCAGGTG 1123
QY 1117 TTTATAATAGAACATATATAAATCTATTTGCAGGAATCAAGCACTCTTTTGAAGGC 1176
DB 1124 GGGCTGATCCACAGTGGATGGTCCCGACCATCCAGAACTCCATGAAGCCCTTCAAGGAC 1183
QY 1177 ---GATCTCTATATGCTATTGAAGAGTGTGAGCTTTGAGTTCCTCAATTTATATGTS 1233
DB 1184 ATGGACTACTCAOGCATCATCGAGCGCTCTCTGAAGCTGGCGGTCCCGCAATCACTCATC 1243
QY 1234 TGGCTCTGATGTTCTACTGCTTCTTCCACCTTTGGTTAAACATATTTGGCAGAGCTTCTC 1293
DB 1244 TGGCTCATCTTCTTCTACTGCTCTTCCACTCTCGCTGAATGGCGGTGGCTGAGCTCATG 1303
QY 1294 TGGCTTCGGGATTCGTGAATTTCTACAAAGATTTGGTGAATGCAAAAGTGTGGGAGATTAC 1353
DB 1304 CAGTTTGGAGACCGGAGTCTTACCGGACTGGTGAAGTCCCGAGTCTGTCACTACTTTC 1363
QY 1354 TGGAGATGCTGGAATATGCTGCTTCTTAAATCGATGGTTCGACATATATATCTTCCCGTGC 1413
DB 1364 TGGCAGAACTGGAAATCATCCCTGTGCACAAAGTGGTGCATCAGACACTTCTACAAAGCCATG 1423
QY 1414 TTGGCAGCAGCATATACCAAGACACTCGCCATTTATCTATTTCTAGTCTCTGAGTCT 1473
DB 1424 CTTCCAGCGGGCAGCAGCAAGTGGATGGCCAGGACAGGGGTGTTCTTGGCTTCGAGTTTC 1483
QY 1474 TTTCAAGAGCTATGATCGCAGTTCCTTGTCTCTCTTCAAGCTATGGGCTTTTCTTGGG 1533
DB 1484 TTTCCACAGTACTCTGTGAGCGTCCCTCTGCGAATGTTCCGCTCTGTGGCTTTTCAAGGGC 1543
QY 1534 ATTATGTTTCAGTGGCTTTTGTCTTTCATC 1563
DB 1544 ATGATGGCTCAGATCCCACTGGCCTTGGTTC 1573
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RESULT 7

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US-09-326-203A-14
; Sequence 14, Application US/09326203A
; Patent No. 6444876
; GENERAL INFORMATION:
; APPLICANT: Lasser, Mike
; APPLICANT: Ruzinsky, Diane
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; FILE REFERENCE: 17045/00/WO
; CURRENT APPLICATION NUMBER: US/09/326,203A
; CURRENT FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 1895
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: m:sc feature
; LOCATION: (209)
; OTHER INFORMATION: n at position 209 is unknown
US-09-326-203A-14

Query Match      7.3%; Score 139.6; DB 4; Length 1895;
Best Local Similarity 54.0%; Pred. No. 3.3e-32;
Matches 308; Conservative 0; Mismatches 259; Indels 3; Gaps 1;

QY 997 TATTTCATGTCGCTCCACATTTGTGTATCAGCCAAAGTATCCAGCTTTCGATGTATA 1056
DB 705 TACTTCTCTTCGCCCCACATTTGTGTACAGACTCAACTTTCGCCGCTCCGCCGATC 764

QY 1057 CGAAGGGTTGGTGCTCGTCAATTTGCAAACTGGTGTATTCACCGGATTCATGGGA 1116
DB 765 CGAAGCGCTTTCGTCGCAAGGATTCCTTGAGATGCTGTCTTCCACCCAGCTCCAGTG 824

QY 1117 TTATTAATGAACAATATATAAATCTTATTTGAGAACTCAAGCATCTTTGAAAGGC 1176
DB 825 GGGCTGATCCAGCAGTGGATGTCCTCCACCATCCAGAACTCCATGAAGCCCTTCAAGGAC 884

QY 1177 ---GATCTCTATATGCTATTGAAAGAGTGTGAAAGCTTTCAAGTTCCAAATTTATATG 1233
DB 885 ATGGACTACTCACGCATCATCGAGCGCTCTCGAAGCTGGCGGTCCCAATCACTCATC 944

QY 1234 TGCGCTCTGCATGTTCTACTGCTCTTCCACCTTTGGTTAAACATATTGGCAGAGCTTCTC 1293
DB 945 TGCGCTCATCTTCTTACTGGCTCTTCCACTCTGCTGTAATGCGGTGGGTGAGCTCATG 1004

QY 1294 TGCTTCGGGATCGTGAATTTCTACAAAGATTGTTGGAATGCAAAAGTGTGGAGATTAC 1353
DB 1005 CAGTTTGGAGACCGGAGTTCTACCGGAGCTGGTGAATCTCCGAGTCTGTCACTTCTC 1064

QY 1354 TGGAGATGTGGAATATGCTGTCTATTAATGATGTTGACATATATATCTTCCGCTGC 1413
DB 1065 TGGCAGAACTGGAACATCTCCCTGTCGCAAGTGTGTCATCAGACACTTCTCAAGCCCATG 1124

QY 1414 TTCCGAGCAGAGATACCAAGAGACTCGCCATATCATTTGCTTCTTCTGAGTCTCTGCAGTC 1473
DB 1125 CTTTCAGCGGCGCAGCAGTGGATGGCCAGACAGGGGTGTTCTTGGCTCGGCCCTTC 1184

QY 1474 TTTTCATGAGCTATGCAATCGAGTTCCTTGTCTCTTCAAGCTATGGGCTTTTCTTGGG 1533
DB 1185 TTTCCAGAGTACCTGGTGGAGCTCCCTCTCGAATGTTCCGCTCTCGGGCTTCACGGGC 1244

QY 1534 ATTATGTTTCAGGTGCTTTGGTCTTTCATC 1563
DB 1245 ATGATGGCTCAGATCCCACTGGCTGGTTC 1274
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RESULT 8

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US-09-326-203A-15
; Sequence 15, Application US/09326203A
; Patent No. 6444876
; GENERAL INFORMATION:
; APPLICANT: Lasser, Mike
; APPLICANT: Ruzinsky, Diane
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; FILE REFERENCE: 17045/00/WO
; CURRENT APPLICATION NUMBER: US/09/326,203A
; CURRENT FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 1766
; TYPE: DNA
; ORGANISM: Rattus sp.
US-09-326-203A-15
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Query Match 7.2%; Score 137.6; DB 4; Length 1766;

Best Local Similarity 53.6%; Pred. No. 1.3e-31;

Matches 309; Conservative 0; Mismatches 264; Indels 3; Gaps 1;

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QY 997 TATTTCATGTCGCTCCACATTTGTGTATCAGCCAAAGTATCCAGCTTTCGATGTATA 1056
DB 834 TACTTCACTTTCCTCTACTTCTTGTGTATGAATCAACTTTCCTGATCCCCCGAATA 893

QY 1057 CGAAGGGTTGGTGCTCGTCAATTTGCAAACTGGTGTATTCACCGGATTCATGGGA 1116
DB 894 CGAAGCGCTTTCGTCGACGGGGTTCCTTGAGATGCTCTTTTCCACCAGCTTCAGTG 953

QY 1117 TTATTAATGAACAATATATAAATCTTATTTGAGAACTCAAGCATCTTTGAAAGGC 1176
DB 954 GGGCTGATCCAGCAGTGGATGTCCTTACTATCCAGAACTCCATGAAGCCCTTCAAGGAC 1013

QY 1177 ---GATCTCTATATGCTATTGAAAGAGTGTGAAAGCTTTCAAGTTCCAAATTTATATG 1233
DB 1014 ATGGACTATTTCAGCAATCATTCAGCGCTCTCTTAAAGCTGGCGGTCCCAACCATCTGATA 1073

QY 1234 TGCGCTCTGCATGTTCTACTGCTCTTCCACCTTTGGTTAAACATATTGGCAGAGCTTCTC 1293
DB 1074 TGCGCTCATCTTCTTACTGGCTTTTCCACTCATGCTCTCAATGCTGGCAGAGCTCTG 1133

QY 1294 TGCTTCGGGATCGTGAATTTCTACAAAGATTGTTGGAATGCAAAAGTGTGGAGATTAC 1353
DB 1134 CAGTTTGGAGACCGGAGTTCTACAGGACTGGTGAATGCTGAGTCTGTCACTACTTT 1193

QY 1354 TGGAGATGTGGAATATGCTGTCTATTAATGATGTTGACATATATATCTTCCGCTGC 1413
DB 1194 TGGCAGAACTGGAATATCCCCGTGCAAGTGTGTCATCAGACACTTCTCAAGCCCATG 1253

QY 1414 TTCCGAGCAGAGATACCAAGAGACTCGCCATATCATTTGCTTCTTCTGAGTCTCTGCAGTC 1473
DB 1254 CTGAGACTGGGAGCAACAATGATGGCAGGACTGGGGTCTTTTGGCGTCAAGCTTC 1313

QY 1474 TTTTCATGAGCTATGCAATCGAGTTCCTTGTCTCTTCAAGCTATGGGCTTTTCTTGGG 1533
DB 1314 TTCCAAGAGTACCTAGTGAGCAATTTCCCTCGAGGATGTTCCGCTCTGGGCTTCAGAGCC 1373

QY 1534 ATTATGTTTCAGGTGCTTTGGTCTTTCATCACAAC 1569
DB 1374 ATGATGGCTCAGGTCCCACTGGCTGGATTTGTGAAC 1409
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RESULT 9

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US-09-326-203A-16
; Sequence 16, Application US/09326203A
; Patent No. 6444876
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Query Match 6.4%; Score 122.6; DB 4; Length 234;
Best Local Similarity 75.3%; Pred. No. 1.4e-27;
Matches 177; Conservative 0; Mismatches 56; Indels 2; Gaps 2;
QY 976 GTTAGCTTGAAGAGCTTGCATATTTTCATGGTGGCTGCCCA-CATTTGTGTATCAGCCAAG 1034
DB 1 GTAAGCTTGAAGAGCTTGCATATTTTCATGGTGGCTGCCCA-CATTTGTGTATCAGCCAAN 60
QY 1035 TTATCCACGTTTCGATGATATCAGGAAGGGTGGTGGCTGGTCAATTTTGCAAACTGGT 1094
DB 61 CTATCTCGCACACCTTATATTCGAAAGGGTGGTGGCTGGTGGCTGGTGGCTGGTGGCTGGT 119
QY 1095 CATATTACCGGATTCATGGGATTTATATAGACATATATATATATATATATATATATATATAT 1154
DB 120 AATATTACAGGAGTTATGGGATTTATATAGACATATATATATATATATATATATATATATAT 179
QY 1155 CTCAGAGATCTCTTCAAGGAGGATCTTCTATATGCTATATGCTATATGCTATATGCTATATG 1209
DB 180 TTCAGAGATCTCTTCAAGGAGGATCTTCTATATGCTATATGCTATATGCTATATGCTATATG 234

RESULT 12
US-09-326-203A-8
Sequence 8, Application US/09326203A
Patent No. 6444876
GENERAL INFORMATION:
APPLICANT: Lasser, Mike
TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
FILE OF INVENTION: Acid Sequences
FILE REFERENCE: 17045/00/00
CURRENT APPLICATION NUMBER: US/09/326,203A
CURRENT FILING DATE: 1999-06-04
PRIOR APPLICATION NUMBER: 60/088,143
PRIOR FILING DATE: 1998-06-05
PRIOR APPLICATION NUMBER: 60/108,389
PRIOR FILING DATE: 1998-11-12
NUMBER OF SEQ ID NOS: 46
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 8
TYPE: DNA
ORGANISM: Zea mays
US-09-326-203A-8

Query Match 5.7%; Score 109.4; DB 4; Length 254;
Best Local Similarity 65.2%; Pred. No. 1.6e-23;
Matches 161; Conservative 0; Mismatches 86; Indels 0; Gaps 0;
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DB 1 TGAAGTATGGTGGTGTATTAATAAGATCTGGCTTTGGTTTATGCTACATCATCTGCGAGACT 60
QY 665 GCGCGCTTTTCATGTTGTATATCCCTTTTCGATCTTCTGGCTGGCTTTTTCGATCTTTT 724
DB 61 GCGCACTGCTAATGTTGCTTGTAGTCTACCCATATTTCCCTTTGGTGTGATTTGCGAGT 120
QY 725 AGAATTTGCTACTTCAGAAATATACATATCAGACCTGTTGTCATCTTTCTTCATATATTA 784
DB 121 AAAAGTTGGCAATTCACAAATCTCATTTAGTATGATCTGCTACTACTCTTTTTCATCTTT 180
QY 785 TCACCATGACAGAGGTTTGTATCCAGTTTATCCAGTTTATCCAGTCTGCTGATCTTAAAGTGTGATCTGCGATT 844
DB 181 TTACAACATTTGAATTTGATATCCAGTCTGCTGATCTTAAAGTGTGATCTGCGATT 240
QY 845 TATCAGG 851
DB 241 TATCAGG 247

RESULT 13
US-09-313-294A-580

Sequence 580, Application US/09313294A
Patent No. 6476212
GENERAL INFORMATION:
APPLICANT: Lalugudi, Raghunath V.
APPLICANT: Ito, Laura Y.
APPLICANT: Sherman, Bradley K.
TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
FILE REFERENCE: PL-0017 US
CURRENT APPLICATION NUMBER: US/09/313,294A
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 7600
SOFTWARE: PERL Program
SEQ ID NO 580
LENGTH: 254
TYPE: DNA
ORGANISM: Zea mays
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6476212 700549471H1
US-09-313-294A-580

Query Match 5.7%; Score 109.4; DB 4; Length 254;
Best Local Similarity 65.2%; Pred. No. 1.6e-23;
Matches 161; Conservative 0; Mismatches 86; Indels 0; Gaps 0;
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DB 1 TGAAGTATGGTGGTGTATTAATAAGATCTGGCTTTGGTTTATGCTACATCATCTGCGAGACT 60
QY 665 GCGCGCTTTTCATGTTGTATATCCCTTTTCGATCTTCTGGCTGGCTTTTTCGATCTTTT 724
DB 61 GCGCACTGCTAATGTTGCTTGTAGTCTACCCATATTTCCCTTTGGTGTGATTTGCGAGT 120
QY 725 AGAATTTGCTACTTCAGAAATATACATATCAGACCTGTTGTCATCTTTCTTCATATATTA 784
DB 121 AAAAGTTGGCAATTCACAAATCTCATTTAGTATGATCTGCTACTACTCTTTTTCATCTTT 180
QY 785 TCACCATGACAGAGGTTTGTATCCAGTTTATCCAGTTTATCCAGTCTGCTGATCTTAAAGTGTGATCTGCGATT 844
DB 181 TTACAACATTTGAATTTGATATCCAGTCTGCTGATCTTAAAGTGTGATCTGCGATT 240
QY 845 TATCAGG 851
DB 241 TATCAGG 247

RESULT 14
US-09-326-203A-4
Sequence 4, Application US/09326203A
Patent No. 6444876
GENERAL INFORMATION:
APPLICANT: Lasser, Mike
APPLICANT: Ruzitsky, Diane
TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
TITLE OF INVENTION: Acid Sequences
FILE REFERENCE: 17045/00/00
CURRENT APPLICATION NUMBER: US/09/326,203A
CURRENT FILING DATE: 1999-06-04
PRIOR APPLICATION NUMBER: 60/088,143
PRIOR FILING DATE: 1998-06-05
PRIOR APPLICATION NUMBER: 60/108,389
PRIOR FILING DATE: 1998-11-12
NUMBER OF SEQ ID NOS: 46
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 4
LENGTH: 267
TYPE: DNA
ORGANISM: Glycine max
US-09-326-203A-4

Query Match 5.7%; Score 108.2; DB 4; Length 267;
Best Local Similarity 67.0%; Pred. No. 3.9e-23;
Matches 179; Conservative 0; Mismatches 68; Indels 20; Gaps 1;


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QY      896 TTCTTATGCTCATATAGTATGATGACATAGATCCCTAGCCCAATGCCAGCTGATAAGG--- 952
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QY      953 -----CCATCTCTGAAGTCTCCTACTACGTTAGCTTGAAGAGCTTGGC 995
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QY      1056 ACGGAGGTTGGGTGGCTCGTCAATT 1382
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RESULT 15
US-09-326-203A-9
; Sequence 9, Application US/09326203A
; Patent No. 6444676
; GENERAL INFORMATION:
; APPLICANT: Lassar, Mike
; APPLICANT: Ruzinskiy, Diane
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; TITLE OF INVENTION: Acid Sequences
; FILE REFERENCE: 17045/00/WO
; CURRENT APPLICATION NUMBER: US/09/326,203A
; PRIOR FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,389
; PRIOR FILING DATE: 1998-11-12
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 9
; LENGTH: 262
; TYPE: DNA
; ORGANISM: Zea mays
US-09-326-203A-9

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Query Match      5.4%; Score 103.6; DB 4; Length 262;
Best Local Similarity 63.0%; Pred. No. 9.9e-22;
Matches 160; Conservative 0; Mismatches 94; Indels 0; Gaps 0;

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QY      666 GCGGCTTTTCATGTTGTATATCCCTTTGATCTTTTGGCTGCTTTACGGTTGA 725
Db      61 GCCACTGCTATGTTGGCTTACTTACCATATTTCCCTTGGTGCATTTGCAATCGA 120

QY      726 GAATGGTCTACTCAGAAATACATATACAGAACCTGTTGTGATCTTTCTCATATATAT 785
Db      121 AAAGTTGGCAATCAACAATCTCATAGTAGATCTGCTACTACCTGTTTTCACATCCCTTT 180

QY      786 CACCATGACAGAGGTTTGTATCCAGTTTACGTCACCTCAGGTTGATTCGCTTTT 845
Db      181 TACAACATTTGAATTTATATCCAGTCTCGTATCTTAAAGTGTGATCTCGAGTTT 240

QY      846 ATCAGGTGTCACTT 859
Db      241 ACAGGCTTTGTTT 254

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: May 5, 2004, 13:25:57 ; Search time 730.533 Seconds

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19: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	1146.4	60.2	1537	15	US-10-223-076-4
4	1125.4	59.1	1512	15	US-10-223-076-8
5	954	50.1	1446	15	US-10-223-076-6
6	751.6	39.5	2090	15	US-10-223-076-10
7	702.4	36.9	1621	13	US-10-425-114-10163
8	702.4	36.9	1888	13	US-10-424-599-111496
9	697	36.5	2099	15	US-10-223-076-12
10	692	36.3	1964	15	US-10-223-076-14
11	470	24.7	470	9	US-09-770-444-209
12	379.4	19.9	1572	15	US-10-223-076-17
13	371	19.5	380	9	US-09-770-791-192
14	365.6	19.2	1181	15	US-10-223-076-16

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16 336.4 17.7 629 15 US-10-223-076-1 Sequence 1, Appli

17 336.4 17.7 629 15 US-10-040-315A-4 Sequence 4, Appli

18 336.4 17.7 629 17 US-10-659 Sequence 4, Appli

19 332.8 17.5 1150 16 US-10-260-238-310 Sequence 310, App

20 269.6 14.2 827 13 US-10-425-114-13703 Sequence 13703, A

21 239.4 12.6 362 13 US-10-424-599-115051 Sequence 115051, A

22 237.6 12.5 775 13 US-10-424-599-68082 Sequence 68082, A

23 154.2 8.1 1035 16 US-10-369-493-30171 Sequence 30171, A

24 154.2 8.1 1035 16 US-10-278-733-5 Sequence 5, Appli

25 151.4 8.0 798 13 US-10-425-114-6719 Sequence 6719, Ap

26 145 7.6 1497 15 US-10-278-733-1 Sequence 1, Appli

27 145 7.6 1497 15 US-10-278-733-12 Sequence 12, Appli

28 144.2 7.6 1698 15 US-10-278-733-6 Sequence 6, Appli

29 141.8 7.4 1650 15 US-10-273-438-3 Sequence 3, Appli

30 141.8 7.4 1650 15 US-10-273-438-9 Sequence 9, Appli

31 141.8 7.4 1650 15 US-10-040-315A-3 Sequence 3, Appli

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33 141.8 7.4 1650 17 US-10-659-800-3 Sequence 3, Appli

34 141.8 7.4 1650 17 US-10-659-800-9 Sequence 9, Appli

35 141.2 7.4 1467 15 US-10-278-733-9 Sequence 9, Appli

36 139.6 7.3 993 9 US-09-764-853-79 Sequence 79, Appli

37 139.6 7.3 1411 15 US-10-273-438-1 Sequence 1, Appli

38 139.6 7.3 1411 15 US-10-040-315A-1 Sequence 1, Appli

39 139.6 7.3 1411 17 US-10-659-800-1 Sequence 1, Appli

40 139.6 7.3 1467 15 US-10-278-733-2 Sequence 2, Appli

41 139.6 7.3 1895 14 US-10-157-855-14 Sequence 14, Appli

42 137.6 7.2 1497 15 US-10-278-733-3 Sequence 3, Appli

43 137.6 7.2 1766 14 US-10-157-855-15 Sequence 15, Appli

44 137.6 7.2 1766 14 US-10-157-855-16 Sequence 16, Appli

45 135.2 7.1 893 13 US-10-424-599-25340 Sequence 25340, A

ALIGNMENTS

RESULT 1

US-10-223-076-2

Sequence 2, Application US/10223076

Publication No. US20030074695A1

GENERAL INFORMATION:

APPLICANT: Farese, Robert V

APPLICANT: Cases, Sylvaine

TITLE OF INVENTION: Plant Diacylglycerol O-transferase and

TITLE OF INVENTION: Uses Thereof

FILE REFERENCE: UCAL-105CIP3

CURRENT APPLICATION NUMBER: US/10/223,076

PRIOR FILING DATE: 2001-10-29

PRIOR APPLICATION NUMBER: 10/040,315

PRIOR FILING DATE: 2001-10-29

PRIOR APPLICATION NUMBER: 09/339,472

PRIOR FILING DATE: 1999-06-23

PRIOR APPLICATION NUMBER: 60/107,771

PRIOR FILING DATE: 1998-11-09

PRIOR APPLICATION NUMBER: PCT/US98/17883

PRIOR FILING DATE: 1998-08-28

PRIOR APPLICATION NUMBER: 09/103,754

PRIOR FILING DATE: 1998-06-24

NUMBER OF SEQ ID NOS: 17

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 2

LENGTH: 1904

TYPE: DNA

ORGANISM: Arabidopsis thaliana

FEATURE:

NAME/KEY: CDS

LOCATION: (139)...(1701)

US-10-223-076-2

Query Match 100.0%; Score 1904; DB 15; Length 1904;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1904; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 ATTCTTAGCTCTCTCAATCCGCTCTTCCCTCTCTCAATTAGATCTGTTCCTCT 60
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DB 61 TCAATTTCTTCTGATCTCTCTGATCTCTCTGAGCTCTTCTTCCGAGCTGTTT 120
QY 121 CGTCAAAAGCTTTTCAAAATGGGATTTGGATTCGCTGGGCTTACTAGGTGAGGAG 180
DB 121 CGTCAAAAGCTTTTCAAAATGGGATTTGGATTCGCTGGGCTTACTAGGTGAGGAG 180
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DB 181 AACGGTGGCGGAGATTCGTCATCTTGAAGCTTCTGTCGAGCGAAATCGAGATCGGAT 240
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DB 241 TCTTCTAAAGGACTTCTTCTCTCTGTTCCGTAATAAATCTCTCTCGGATGATTTGA 300
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DB 541 TTAATCAACCTCTGTGTAGTCTTATTCGTTGTAACAGTAGTACATCATCGAAAT 600
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DB 601 CTTAAGAGATGCTGTGTAGTCTCAGAACGGAATTCGTTGTTAGTCAAGATCGCTCGGA 660
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RESULT 2

US-10-157-855-1
; Sequence 1, Application US/10157855
; Publication No. US20020170091A1
; GENERAL INFORMATION:
; APPLICANT: Lussner, Michael W.
; APPLICANT: Ruzinskiy, Diane M.
; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
; FILE REFERENCE: -6516.158
; TITLE OF INVENTION: Acid Sequences
; CURRENT FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 09/326,203
; PRIOR FILING DATE: 1999-06-04
; PRIOR APPLICATION NUMBER: 60/088,143
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/108,399

; PRIOR FILING DATE: 1998-11-12
 ; NUMBER OF SEQ ID NOS: 46
 ; SOFTWARE: Patent in Ver. 2.1
 ; SEQ ID NO 1
 ; TYPE: DNA
 ; ORGANISM: Arabidopsis thaliana
 US-10-157-855-1

Query Match 96.6%; Score 1839.4; DB 14; Length 1942;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1840; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB	519	GGAGAGGAGAGGAAACGCGATGCTACTAGTTTACGATCGACGCTCGGTTCCAG	578
QY	481	CGAGGCGGAGAGAGTCCATTTAGCTCCGACGCAATCTTCAACAGAGCGTCCG	540
DB	579	CGAGGCGGAGAGAGTCCATTTAGCTCCGACGCAATCTTCAACAGAGCGTCCG	638
QY	541	TTATTCAACCTCTGCTAGTAGTTCTTATTCTGTAACAGTACGATCATCATGAA	600
DB	639	TTATTCAACCTCTGCTAGTAGTTCTTATTCTGTAACAGTACGATCATCATGAA	698
QY	601	CTTATGAAGTATGTTGTTGATCAGACGGAATTTCTGTTTATGTTCAAGATCG	660
DB	699	CTTATGAAGTATGTTGTTGATCAGACGGAATTTCTGTTTATGTTCAAGATCG	758
QY	661	GATTTGGCGCTTTTCAATGTTGTTATATCCCTTTGATCTTCTGCTGGCTTTAC	720
DB	759	GATTTGGCGCTTTTCAATGTTGTTATATCCCTTTGATCTTCTGCTGGCTTTAC	818
QY	721	GTTGAGAAATTTGTTACTTCAAAATACATATCGAACTGTTGTCATCTTCTCAT	780
DB	819	GTTGAGAAATTTGTTACTTCAAAATACATATCGAACTGTTGTCATCTTCTCAT	878
QY	781	ATTATCACCATGACAGAGTTTGTATCCAGTTTACGTCACCGTAAGGTGATCTG	840
DB	879	ATTATCACCATGACAGAGTTTGTATCCAGTTTACGTCACCGTAAGGTGATCTG	938
QY	841	TTTTTATCAGGTGTCACCTTGAATGCTCTCTCTGATGTTGCTTAAAGTTGTT	900
DB	939	TTTTTATCAGGTGTCACCTTGAATGCTCTCTCTGATGTTGCTTAAAGTTGTT	998

QY	901	TATGCTCATCTAGCTATGACATAAGATCCCTAGCAATGAGCTGATAAGGCCAATCT	960
DB	999	TATGCTCATCTAGCTATGACATAAGATCCCTAGCAATGAGCTGATAAGGCCAATCT	1058
QY	961	GAAGTCTCTTACTAGCTTGAAGAGCTTGGCATATTTTATGCTGCTCCCATG	1020
DB	1059	GAAGTCTCTTACTAGCTTGAAGAGCTTGGCATATTTTATGCTGCTCCCATG	1118
QY	1021	TGTTATCAGCAAGTATTCACGTTCTGATGATATACGAGAGGTTGGTGGCTGTC	1080
DB	1119	TGTTATCAGCAAGTATTCACGTTCTGATGATATACGAGAGGTTGGTGGCTGTC	1178
QY	1081	TTTTCGAAATCTGCTCATATTCACGGAATTCATGGATTTTAAATAGAAATATA	1140
DB	1179	TTTTCGAAATCTGCTCATATTCACGGAATTCATGGATTTTAAATAGAAATATA	1238
QY	1141	CCTATTGTCGGAATCTCAAGCATCTTTGAAAGCGATCTTCTATATGCTATTA	1200
DB	1239	CCTATTGTCGGAATCTCAAGCATCTTTGAAAGCGATCTTCTATATGCTATTA	1298
QY	1201	GTGTTGAGCTTTCAGTTCCAAATTTATATGCTGGCTCTGATGTTCTACTGCT	1260
DB	1299	GTGTTGAGCTTTCAGTTCCAAATTTATATGCTGGCTCTGATGTTCTACTGCT	1358
QY	1261	CACCTTTGGTTAAACATATTCGCGAGCTTCTCTGCTTCGGGATCGTGAATTC	1320
DB	1359	CACCTTTGGTTAAACATATTCGCGAGCTTCTCTGCTTCGGGATCGTGAATTC	1418
QY	1321	GATTGGTGGAAATCGAAAGTGTGGAGATTAATCGAGAAATGGAATATGCTG	1380
DB	1419	GATTGGTGGAAATCGAAAGTGTGGAGATTAATCGAGAAATGGAATATGCTG	1478
QY	1381	AAATGGATGTTGCAATATATATTCGCGTCTGCGAGCATATACCAAGACATC	1440
DB	1479	AAATGGATGTTGCAATATATATTCGCGTCTGCGAGCATATACCAAGACATC	1538
QY	1441	GCCATTATCATGCTTCTCTAGTCTCTGAGTCTTTCATGAGCTATGATCGAGT	1500
DB	1539	GCCATTATCATGCTTCTCTAGTCTCTGAGTCTTTCATGAGCTATGATCGAGT	1598
QY	1501	TGTCGTCTCTTCAAGCTATGGCTTTTCTTGGATATATGTTTCAAGTGTGCT	1560
DB	1599	TGTCGTCTCTTCAAGCTATGGCTTTTCTTGGATATATGTTTCAAGTGTGCT	1658
QY	1561	ATCCAACTATCTACAGAAAGTGTGGCTCAACGTTGGGAAATCATGATCTT	1620
DB	1659	ATCCAACTATCTACAGAAAGTGTGGCTCAACGTTGGGAAATCATGATCTT	1718
QY	1621	ATCTTCTGCAATTTTCGACCAACCGATGTTGTTGCTTCTTTATACCAAGCT	1680
DB	1719	ATCTTCTGCAATTTTCGACCAACCGATGTTGTTGCTTCTTTATACCAAGCT	1778
QY	1681	CGAAAGGATCGATGTCATGAAACAACTGTTTCAAAAATGACTTTCTTCAAA	1740
DB	1779	CGAAAGGATCGATGTCATGAAACAACTGTTTCAAAAATGACTTTCTTCAAA	1838
QY	1741	GCCTCGTGGATCTCCGTTGATGTTGCTGCTGCTGCTGCTGCTGCTGCTG	1800
DB	1839	GCCTCGTGGATCTCCGTTGATGTTGCTGCTGCTGCTGCTGCTGCTGCTG	1898
QY	1801	ATAACCTTGAAGAGAAAGAAATATAGAGTTGTTGTATC	1841
DB	1899	ATAACCTTGAAGAGAAAGAAATATAGAGTTGTTGTATC	1939

RESULT 3
 US-10-223-076-4
 ; Sequence 4, Application US/10223076
 ; Publication No. US20030074695A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Farese, Robert V
 ; APPLICANT: Cases, Sylvaine
 ; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and

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; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: UCAL-105C1P3
; CURRENT APPLICATION NUMBER: US/10/223,076
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1537
; TYPE: DNA
; ORGANISM: Brassica napus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (2)...(1107)
US-10-223-076-4

Query Match      60.2%; Score 1146.4; DB 15; Length 1537;
Best Local Similarity 86.1%; Pred. No. 0;
Matches 1350; Conservative 0; Mismatches 161; Indels 57; Gaps 5;

QY 132 TTTCGAATGCGGATTTGGATTCTGCTGGCTTACTACGGTACGAGGAAACGGTGGCGG 191
DB 15 TTTCGAATGCGGATTTGGATTCTGAGCGCTCACTAAGCGGAGAGACGGTGGTGC 74
QY 192 AGAGTTGCTGCATCTTGATAGGCTTCTGTCAGCGAAATCGAGATCGGATCTTTAAACGG 251
DB 75 -----CGATCTCGATACGCTTCTGTCAGCGAAACCGAGATCGGATCTTTCCAAATGG 125
QY 252 ACTTCTCTCTCTGCTGGTTCGGAATTAATCTCTCTTCGSMATGATTTGGAGCTCCGCCGA 311
DB 126 ACTTCTCTCTCTGATTCGCTACTGTTTCCGAT-----GCTGA 161
QY 312 CTTTAGGATCGGATTTGATTTCCGTTGTTAAACGATGACGCTCAGCGAAACAGCAATTTGGC 371
DB 162 CGTAGGATCGGTTGATTTAGCTGTT---GAGGATCTCAAGGAAAGACCAATTTGCG 218
QY 372 CGGAGATTAATACGGTGGTGGCGATTAATACGGTGGTGGAGGCGCGCGAGAGGAAG 431
DB 219 CGGAG-----AAAACGAAATTTAGGGAATCGCGTGGAGAGCGGG 257
QY 432 AGGAAACGCCGATGCTAGCTTTACGATACGACGCTCGGTTTCCAGCTCATCGGAGGCGGAG 491
DB 258 GGGAAACGTTGGATGATGAGGTACAGTATCGCGCTCGGTTCCAGCTCATCGGAGGTTGCG 317
QY 492 AGAGAGTCCACTTAGCTCCGAGCGCAATCTTCAAACAGACGCCATGCGGATTTATCAACCT 551
DB 318 GAGAGAGTCCACTCAGCTCTGAGCGCCATCTTCAAACAGACGCCATGCTGAGCTATTCACCT 377
QY 552 CTGCTAGTAGTCTTTATTTGCTGTAAGAGTAGATCATCATCGAAMATCTTTATGAGTA 611
DB 378 GTGTAGTAGTCTTTGTTGCTGTAAGAGTAGATCATCATCGAAMATCTTTATGAGTA 437
QY 612 TGGTTGGTTGATCAGAAAGGATTTCTGTTTATGTTAGTCAAGATCGCTGCGAGATTTGGCGCT 671
DB 438 CGGTTGGTTGATCAGAAAGGATTTCTGTTTATGTTAGTCAAGATCTCTGCGAGATTTGGCCCT 497
QY 672 TTTCATGTTGTTATATCCCTTTGATCTTTCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTT 731
DB 498 TTTCATGTTGTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTT 557
QY 732 GGTACTTCAAGAAATCATATCAGAACCTGTTGCTATCTTTCTTCATATTTATTTATCACCAT 791
DB 558 AGTACTTCAAGAAATCATATCAGAACCTGTTGCTATCTTTCTTCATATTTATTTATCACCAT 617

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RESULT 4

US-10-223-076-8

; Sequence 8, Application US/10223076

; Publication No. US20030074695A1

; GENERAL INFORMATION:

; APPLICANT: Farese, Robert V

; APPLICANT: Cases, Sylvaine

; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and

```

QY 792 GACAGAGTTTGTATCCAGTTTACGTCACCCCTAAGGTGTGATTTCTGCTTTTATCAGG 851
DB 618 GACCGAGGTTTGTATCCAGTTTATGTCACCTTAAGGTGTGATTTCCGCTTTCTATCAGG 677
QY 852 TGTCACTTTGATGCTCTCTCAGTTGCAATGTTGTGGCTAAAGTTTGGTTTCTTATGCTATAC 911
DB 678 TGTCACTTTGATGCTCTCTCAGTTGCAATGTTGTGGCTAAAGTTTGGTTTCTTATGCTATAC 737
QY 912 TAGCTATGATCAATAGATTCCTTAGCCAAATGAGCTGATTAAGCCCAATCTGGAAGTCTCTTA 971
DB 738 TAACTATGATCAATAGAACCTTAGCTAAATCATCTGATAAGGCCAATCTGGAAGTCTCTTA 797
QY 972 CTACGTTAGCTTGAAGAGCTTGGCATAATTTCACTGCTGCTCCACATTTGTTATCAGCC 1031
DB 798 CTATGTTAGCTTGAAGAGCTTGGCGTATTTCACTGCTGCTCCACATTTGTTATCAGCC 857
QY 1032 AAGTTATCCAGCTTCTGCAATGATATAGCGAAGGTTGGGTGGCTCGTCAATTTGCCAAACT 1091
DB 858 GAGCTATCCAGCTTCTCAGTATATCGGAAGGTTGGGTGGCTCGTCAATTTGCCAAAGCT 917
QY 1092 GGTCAATATTCACCGGATTTATATAGGAATATATAGAACAAATATATAATCTTATGTCAG 1151
DB 918 GATCATATTTCACTGGATTTATATAGGATTTATATAGAGCAATATATATATCTTATGTTAG 977
QY 1152 GAACTCAAAAGCATCTTTGAAAGGCGATCTCTATATGCTTATTTGAAAGAGTGTGGAAGCT 1211
DB 978 GAACTCAAAAGCATCTTTGAAAGGCGATCTCTATAGCGGATCTTTATAGCGTGTGAAAGAGTGTGGAAGCT 1037
QY 1212 TTCAGTTCCAAATTTATATGTTGTGGCTCTGCAATGTTCTACTGCTTCTTCCACCTTTGGTT 1271
DB 1038 TTCAGTTCCAAATTTATATAGTGTGGCTCTGCAATGTTCTACTGCTTCTTCCACCTTTGGTT 1097
QY 1272 AAACATATTTGGGAGAGCTTCTGCTTGGGATCTGTAATCTTCAAGAGATTTGGTGGAA 1331
DB 1098 AAACATATTTGGGAGAGCTTCTGCTTGGGATCTGTAATCTTCAAGAGATTTGGTGGAA 1157
QY 1332 TCGAAAGAGTGTGGGAGATTTACTGGAGATTTGCGAATATGCGTGTTCATAAAATGGAGTGT 1391
DB 1158 TCGAAAGAGTGTGGGAGATTTACTGGAGATTTGCGAATATGCGTGTTCATAAAATGGAGTGT 1217
QY 1392 TCGACATATATATCTTCCGTTGCTTGGCAGCAAGATACCAAGACACTCGGCCATTTATCAT 1451
DB 1218 TCGACATATATATCTTCCGTTGCTTGGCAGCAAGATACCAAGACACTCGGCCATTTATCAT 1277
QY 1452 TCGTTTCTAGTCTCTGAGTCTTTTCACTGAGCTATGCAATGCGAGTTCCTTGTGCTCTCT 1511
DB 1278 TCGTTTCTAGTCTCTGAGTCTTTTCACTGAGTATGCAATGCGAGTTCCTTGTGCTCTCT 1337
QY 1512 CAAGCTATCGGCTTTTCTTGGGATTTATGTTTCAAGGTGCTTGTGCTTCTCATCAAACTA 1571
DB 1338 CAACATATCGGCTTTTCTTGGGATTTATGTTTCAAGGTGCTTGTGCTTCTCATCAAACTA 1397
QY 1572 TCTACAGGAAAGTGTGGCTCAACGGTGGGGAACATGATCTTCTGTTTATCTTCTGCTAT 1631
DB 1398 CTTACAAGAAAGTGTGGCTCCATGTTGGGAAACATGATATCTGTTTACCTTCTGCTAT 1457
QY 1632 TTTTGGACACCGAGTGTGCTTCTTATTTACACGAGCTCTGATGACCGAAAGGATC 1691
DB 1458 TTTTGGACACCGAGTGTGCTTCTTATTTATCATCAGCTTGTATGACCGAAAGGAA 1517
QY 1692 GATGTCAT 1699
DB 1518 GATGTCAT 1525

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; TITLE OF INVENTION: Uses Thereof
 ; FILE REFERENCE: UCAL-105CIP3
 ; CURRENT APPLICATION NUMBER: US/10/223,076
 ; CURRENT FILING DATE: 2001-10-29
 ; PRIOR APPLICATION NUMBER: 10/040,315
 ; PRIOR FILING DATE: 2001-10-29
 ; PRIOR APPLICATION NUMBER: 09/339,472
 ; PRIOR FILING DATE: 1999-06-23
 ; PRIOR APPLICATION NUMBER: 60/107,771
 ; PRIOR FILING DATE: 1998-11-09
 ; PRIOR APPLICATION NUMBER: PCT/US98/17883
 ; PRIOR FILING DATE: 1998-08-28
 ; PRIOR APPLICATION NUMBER: 09/103,754
 ; PRIOR FILING DATE: 1998-06-24
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 8
 ; LENGTH: 1512
 ; TYPE: DNA
 ; ORGANISM: Brassica napus
 ; FEATURES:
 ; NAME/KEY: CDS
 ; LOCATION: (1)...(1512)
 US-10-223-076-8

Query Match 59.1%; Score 1125.4; DB 15; Length 1512;
 Best Local Similarity 84.5%; Pred. No. 0;
 Matches 1321; Conservative 0; Mismatches 191; Indels 51; Gaps 3;

Qy	139	ATGCGATTTTGGGATTCGCTGGCTTACTACGGTGACGGGAACGGTGGCGGAGATTC	198
Db	1	ATGCGATTTTGGATTCGGAGSCTCGCTGTACCGCCGACGGAGACGGCG-----TC	54
Qy	199	GTCGATCTGTAGAGCTTCGTGCGACGGAAATCGAGATCGGATCTCTAAGGACTCTTT	258
Db	55	GCGGATCTCGACAGGCTCCACGGTGGTAAATCGAGTTCGGATCTCTCBAAGGACTCTCT	114
Qy	259	CTCTCTGGTCCGATAAATAATCTCTTCGGATGATGTTGGAGCTCCGCGGACGCTAGG	318
Db	115	TCGG-----ATACCTTCCCGTCGACGATGTTGGAGCTGCGCGGCGCGAAGG	162
Qy	319	GATCGGATGATTCGGTGTGTTAAAGATGACGCTCAGGGAAACAGCCAAATTTGGCCGAGAT	378
Db	163	GATCGGATGATTCGGCTGCCGAGGAGGAGCTCAGGGAAACAGCCAAATTTAGCTGCGGA	222
Qy	379	AATACGGTGGTGGGATTAATAAGTGGTGAAGAGCGCGGAGAGAGGAAAC	438
Db	223	GATCGGAAACTAGGGAATCCGCGCGAGG-----	251
Qy	439	GCAGATGCTACGTTTACGATGACCGCTCGGTTCCAGCTCATCGGAGGCGAGAGAT	498
Db	252	--CGATGTAAGGTTTACGATGACCGCTCGGTTCCAGCTCATCGGAGGCGAGAGAT	309
Qy	499	CCACTAGCTCCGACGCAATCTTCAACAGAGCCATGCGGATTAATCAACCTCTGTGA	558
Db	310	CCACTAGCTCCGACGCTATCTTCAACAGAGCCATGCGGATTAATCAACCTCTGTGA	369
Qy	559	GTAGTCTTATGCTGTAACAGTAGACTCATCATCGAAATCTTATGAAGTATGGTTGG	618
Db	370	GTTGCTTCTGTTGCTGTTAAACAGTAGACTCATCATCGAAATCTTATGAAGTATGGTTGG	429
Qy	619	TTGATCAGACGAGATTTCTGTTTGTAGTTCAAGTCGCTCGGAGATTCGCGCTTTTCATG	678
Db	430	TTGATCAGACGAGATTTTGTGTTTGTAGTTCTCATCTTACGAGACTGCGCGCTTTTCATG	489
Qy	679	TGTTGATATCCCTTTCGATCTTTTCCTTGGCTGCTTTACGTTTGAATAATTTGTTACTT	738
Db	490	TGTTGCTTTCACCTTCGCTTCTTCTTTCCTTGGCTGCTTTACGTTTGAATAATTTGTTACTT	549
Qy	739	CAGAAATACATATCAGAAACCTTGTGTCATCTTCTTCATATATATATCACCATGACAG	798
Db	550	CAGAAATACATATCTGAGCCTGTTGCCATCATCTTTCATGTCATATATATCACCATGACAG	609

RESULT 5

US-10-223-076-8
 ; Sequence 6, Application US/10223076
 ; Publication No. US20030074695A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Farese, Robert V
 ; APPLICANT: Cases, Sylvaine
 ; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and

Qy	799	GTTTGTTTCCAGTTTACGTACCCCTTAAGTGTGATTCGTGTTTTTATCAGGTGTCAC	858
Db	610	GTCTTGTTTCCAGTCTACGTACACTGAGTGTGATCTCTGCTCTTCTGTCAGGTGTCAC	669
Qy	859	TTGATGCTCCTCCTCATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	918
Db	670	TTGATGCTGCTCCTCATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	729
Qy	919	GACHTAAGATCCCTAGCAGCTGATAGGCGCAATCCTGGAAGTCTCTCTACTAGTT	978
Db	730	GACHTAAGAAACCTGCGCAATTCAGCTGATAGGCTGATCCTGAAATCTCTCTACTAGTT	789
Qy	979	AGCTTGAAGAGCTTCGCAATTTCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	1038
Db	790	AGCTTGAAGAGCTTCGCTGATTTCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	849
Qy	1039	CCACGTTCTGCAATGATATACGGAAGGCTTGGGTGGCTCGTCAATTTTCAAAATCTGGTCA	1098
Db	850	CCACGTTCTGCAATGATATACGGAAGGCTTGGGTGGCTCGTCAATTTTCAAAATCTGGTCA	909
Qy	1099	TTACCCGATTCATGGGATTTATATAGAAATATATATAATATATATATATATATATATATAT	1158
Db	910	TTCACTGCACTCATGGATTTATATAGAGCAATATATAATCTCTATTTGTTAGGAATCTCA	969
Qy	1159	AGCATCTCTTGAAGGCGATCTTCTATATGCTTATTTGAAGAGCTGTTGAGCTTTTCAGTT	1218
Db	970	AGCATCTCTTGAAGGCGATCTTCTATATGCTTATTTGAAGAGCTGTTGAGCTTTTCAGTT	1029
Qy	1219	CCAAATTTATATGCTGCTCTGCAATGTTTCTACTGCTTCTTCCACCTTTGGTTAAACATA	1278
Db	1030	CCAAATTTATATGCTGCTCTGCAATGTTTCTACTGCTTCTTCCACCTTTGGTTAAACATA	1089
Qy	1279	TTGCGAGAGCTTCTCTGCTTCCGGGATCTGTAATTTCTAAGAGATTTGGTGAAGTCAAAA	1338
Db	1090	TTGCGAGAGCTTCTCTGCTTCCGGGACCGTGAATTTCTAAGAGATTTGGTGAAGTCAAAA	1149
Qy	1339	AGTGTGGAGATTTACTGGGAATGTTGAATATGCTGTTTCAATAATGATGTTGTCACAT	1398
Db	1150	AGCTTGGAGATTTATGGGAATGTTGAATATGCTGTTTCAATAATGATGTTGTCACAT	1209
Qy	1399	ATATACITCCCGTGTGCGCAGCAAGATACCAAGACACTCGCCATTTATCATTTGCTTTC	1458
Db	1210	GTATACITTCCTGCTGCTGCGCATCAAGATACCAAGTACCGCCATTTATCATTTGCTTTC	1269
Qy	1459	CTAGTCTCTGAGTCTTTTCATGAGCTATGCTATGCGAGTCTCTGCTCTCTTCAGCTA	1518
Db	1270	TTAGTCTCTGAGTCTTTTCATGAGTATGCTATGCGAGTCTCTGCTCTCTTCATCTA	1329
Qy	1519	TGGGCTTTTCTTGGGATTTATGTTTCAGGTGCTTGGTCTTCATACAAACTATCTACAG	1578
Db	1330	TGGGCTTTTCTTGGGATTTATGTTTCAGGTGCTTGGTCTTCATACAAACTATCTACAG	1389
Qy	1579	GAAAGTTTGGCTCAACGCTGGGGAACATGATCTTCTGTTTCATCTCTCTSCATTTTCGA	1638
Db	1390	GAAAGTTTGGCTCCATCGTGGGAACATGATCTTGGTTCAGTCTTCTGCTTTTCGA	1449
Qy	1639	CAACCGATGTTGCTCTTCTTTTACACGACCTGATGAACCGGAAAGGATGATGCA	1698
Db	1450	CAACCGATGTTGCTCTTCTTTTACACGACCTGATGAACCGGAAAGGATGATGATGTC	1509
Qy	1699	TGA 1701	
Db	1510	TGA 1512	

Qy	1254	CTTCTTCCACCTTTGGTTAAACATATATGGCAGAGCTTCTCTGCTTCGGGGAATCGTGAATT	1311
Db	660	CTTCTTCCACCTTTGGTTAAACATATATGGCAGAGCTCTCTGCTTCGGGACCGTGAATT	719
Qy	1314	CTACACAGATTGGTGGGAATCCAAAAGTGTGGGAGATTACTCGGAGATGTGGGATATGCCC	1373
Db	720	CTACACAGATTGGTGGGAATCCAAAAGCGTTGGAGATTATTGGGAAATGTGGGAATATGCC	779
Qy	1374	TGTTCTATAATGGATGGTTCCGACATATATACTTCCCGTGTTCGGCAGCAGATACCCAAA	1433
Db	780	TGTTCTCAAAATGGATGGTTCCGACATGTATACTTTCGTGCTGGCATCAGATACCCAAA	839
Qy	1434	GACACTCGGCATATATCATTCGTTCTTCCTAGTCTCTGCAAGTCTTTCATGAGCTATGCATCGC	1493
Db	840	AGTACCCGCGCAATATCATTTCTTTCTTCTAGTCTCTGCAAGTCTTTCATGAGTATGCATCGC	899
Qy	1494	AGTTCCTTGTGCTCTCTTCAAGCTATCGGGCTTTTCTTGGGATTAATGTTTCAGGTTGCCCTT	1553
Db	900	AGTTCCTTGGGCTCTCTTCAATCTAAGGGCTTTTCATGAGGAATTAATGTTTCAGGTTGCCCTT	959
Qy	1554	GGTCTTTCATCACAAACTATCTACAGGAAAGTTTGGCTCAACGGTGGGGAACATGATCTT	1613
Db	960	GGTCTTTCATCACAAACTTTTTTACAAGAAAGTTTGGCTTCCATGGTGGGAACATGATCTT	1019
Qy	1614	CTGGTTTCATCTTCTGCATTTTTCGACACCGATGTGTGTGCTCTTCTTATTACCAAGACCT	1673
Db	1020	TGGTTTCAGCTTCTTGCATTTTTCGACAAACGATGTGTGTGCTCTTCTTATTACCAAGACCT	1079
Qy	1674	GATGACCGGAAAGGATCGATGTCATGAAA	1703
Db	1080	GATGACCGGAAAGGATCCATGTCCTGAAA	1109

RESULT 6

US-10-223-076-10

; Sequence 10, Application US/10223076

; Publication No. US20030074695A1

; GENERAL INFORMATION:

; APPLICANT: Farese, Robert V

; APPLICANT: Cases, Sylvaine

; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and

; TITLE OF INVENTION: Uses Thereof

; FILE REFERENCE: UCLAL-105CIP3

; CURRENT APPLICATION NUMBER: US/10/223,076

; CURRENT FILING DATE: 2001-10-29

; PRIOR APPLICATION NUMBER: 10/040,315

; PRIOR FILING DATE: 2001-10-29

; PRIOR APPLICATION NUMBER: 09/339,472

; PRIOR FILING DATE: 1999-06-23

; PRIOR APPLICATION NUMBER: 60/107,771

; PRIOR FILING DATE: 1998-11-09

; PRIOR APPLICATION NUMBER: PCT/US98/17883

; PRIOR FILING DATE: 1998-08-28

; PRIOR APPLICATION NUMBER: 09/103,754

; PRIOR FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 17

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 10

; LENGTH: 2090

; TYPE: DNA

; ORGANISM: Tropaeolum majus

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (171)...(1727)

US-10-223-076-10

Query Match 39.5%; Score 751.6; DB 15; Length 2090;

Best Local Similarity 75.6%; Pred. No. 3 6e-210;

Matches 969; Conservative 0; Mismatches 289; Indels 24; Gaps 2;

Qy 432 AGGAACGGCGAGTCTACGTTTACGTPATCGACCGTTCGGTTCAGCTCATCGGAGGCGGAG 491

QY 492 AGAGAGTCCACTTAGCTCCGACGGAATCTTCAACAGAGCCATGCCGGAATATTCAACCT 551
DB 500 GGAGAGTCCCTCTTAGCTCTGATGCAATCTTCAACAGAGCCATGCCGGAATATTCAACCT 559
QY 552 CTGTGTAGTAGTCTTATTGCTGTAAACAGTAGACTCATCGAATACTTATGAAGTA 611
DB 560 GTGTATAGTAGTCTCATGTGAGTAACAGTAGGCTTATCATCGAATACTTATGAAGTA 619
QY 612 TGGTTGGTTGATCAGAACCGGATTTCTGGTTTAGTTCAAGATGCTGCGAGATTTGCCGCT 671
DB 620 TGGTTGGTTGATCAGACTCTGTTCTGGTTTAACTCAAGATCAGTGGGTGATTTGGTCCAT 679
QY 672 TTTCAATGCTGTATATCCCTTTGATCTTCTGCTTGGCTGCTTACGTTGAGAAATTT 731
DB 680 CTTATGCTGTCTTACACTCCCAATTTTCCCACTTCTGCTTCTTATTTGTAAGAACT 739
QY 732 GGTACTTTCAGAAATACATATCAGAACCTGTGTCATCTTCTTCATATATTATACCACT 791
DB 740 GGTCCAGGAAATCATATATCTGAACCTTGTGCTGCTTCTTCTGATGAATGCTTCTAC 799
QY 792 GACAGAGCTTTTATCCAGTTTACGTACACCTTAAGGTGTGATTTCTGCTTTTATCAGG 851
DB 800 CGCTGCAGTTTATATCCAGTTTATGATCTTAACGTGTGATTCGGTGTATATGCTCG 859
QY 852 TGTCACTTGTATGCTCCTCAGTTCATGATGTGTGCTAAAGTTGGTTCTTATGCTCATAC 911
DB 860 TGTGTTATGATGCTCTTGTGCTCATATGTTGTTGAGTGTGCTGCTCATATGACATAC 919
QY 912 TACGTATGACATAAGATCCCTAGCAATGCACTGATAGG----- 952
DB 920 TAGTTCGATATTAAGACATGGCCAAATCTGGCTATAGGGGGATGGCACCCCAATTC 979
QY 953 --CCAAATCTGAACTCTCTACTAGTTAGCTTGAAGAGCTTGGCATATTTTATGGTGC 1010
DB 980 AACCAATGTGAGTTGCTCATATGATGTAGCTTGAAGAGTTTGGCATATTTATGGTGC 1039
QY 1011 TCCCACTTGTGTATCAGCCAAAGTTATCCAGTTCGCTCATGTATACGGAAGGTTGGGT 1070
DB 1040 GCCGACATATTTACAGCCCTAGTATCTCTGTTCTGCTGCTATCCGCAAGGGTTGGGT 1099
QY 1071 GGCTCGTCAATTTCCAAACTGGTTCATATTCACCGAATTCATGGATTTATAATAGACA 1130
DB 1100 TGTTCGTCATTTGTCAAACTAATAGTTTCTAGAGCTCATGGGTCTATATAGACA 1159
QY 1131 ATATATAAATCTTATGTGAGAACTCAAGCATCTTTTGAAGGCGATCTTCTATATGC 1190
DB 1160 ATATATAAATCTTATGTGAAATTTCCAAACACCCATTTGAAGGAGATTTTATATGC 1219
QY 1191 TATGAAAGAGTGTGAGCTTTTCACTTCCAAATTTATATGTGTGCTCTGCTATGTTCTA 1250
DB 1220 ATAGAAGAGTGTGAGCTTTTGAAGCTTTTCACTTCCAAATCTATATGTTTGGCTATGTTCTA 1279
QY 1251 CTGCTTCTTCCACCTTTGGTTTAAACATATTTGGCAGAGCTTCTCTGCTTCCGGGATCGTA 1310
DB 1280 CTCTTTTTCACCTCTGTTGACATACACTGCTGAGCTTCTTCTGCTTGTGATGCTGA 1339
QY 1311 ATTCTAAGAGATTTGGTAATGCAAAAGTGTGGAGATTTACTGGAAATGTGGAATAT 1370
DB 1340 ATTCTAAGAGATTTGGTAATGCAAAAGTGTGGAGATTTACTGGAAATGTGGAATAT 1399
QY 1371 GCTGTTTCAATATGAGTGTGACATATATCTTCCGCTGCTTGGCAGCAGATAC 1430
DB 1400 GCTGTTTCAATATGAGTGTGACATATATCTTCCGCTGCTTGGCAGCAGATAC 1459
QY 1431 AAAGACACTGCCATTTATCTGCTTCTAGTCTCTGCACTCTTCTCATGAGCTATGAT 1490
DB 1460 CAAGGAGGTGCCATTTATCTGCTTCTAGTCTTCTGCTTCTGCTTCTCATGAGCTTCTGAT 1519
QY 1491 CGCAGTTCTTGTGCTCTCTTCAAGCTATGGGCTTTTCTGGGATTTATGTTTCAGGTGCC 1550
DB 1520 TGCAGTTCTTGTGCTCTCTTCAAGCTATGGGCTTTTATGAGCATTTATGTTTCAGGTGCC 1579

QY 1551 TTTGCTCTTCTATCAAAACTATCTATCAGGAAAGGTT---TGGCTCAACCGTGGGGAACAT 1607
DB 1580 CTTGCTATTTGATTACGAATTTATCTACAAGAAAGTTTCAGTAATTTCTATGTTGGCAATAT 1639
QY 1608 GATCTTCTGCTTCTATCTTCTGCTATTTTCGGACAAACCGATGTGTGCTCTTCTTATTACCA 1667
DB 1640 GATCTTCTGCTTCTATCTTCTGCTATTTTCGGACAAACCGATGTGTGCTCTTCTTATTACCA 1699
QY 1668 CGACCTGATGAACCGAAAGGA 1689
DB 1700 TGACCTGATAAATCTTAAAGGA 1721

RESULT 7

US-10-425-114-10163
; Sequence 10163, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingsong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack B
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(5313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 10163
; LENGTH: 1621
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: 700896419_FLI
US-10-425-114-10163

Query Match 36.9%; Score 702.4; DB 13; Length 1621;
Best Local Similarity 73.4%; Pred. No. 9.7e-196;
Matches 936; Conservative 0; Mismatches 316; Indels 24; Gaps 2;

QY 438 CGCCGAGCTAGCTTACGATCGACCGTCCGTTCCAGCTCATCGAGGCGCAGAGAG 497
DB 331 CGCCGAGCTTCAAAATACGCTTACCGTCCCTCGTTCCCGCACCCGCAATCAAGAGAG 390
QY 498 TCCACTTACGCTCCGACGCAATCTTCAACAGAGCCATGCCGATTTATTCACCTCTGTGT 557
DB 391 CCCCCTTACGCTCCGACCAATCTTCAAGACAGATCATGACGACTGTTCATCTGCAAT 450
QY 558 ASTAGTCTTATGCTGTAAACAGTAGACTCATCATCGAATACTTATGAAGTATGTTG 617
DB 451 ASTAGTCTTGTGCGGTGAACAGCAGACTTATCATTCAGAAATTTAATGAAGTATGTTG 510
QY 618 GTTCATCAGACGAGATTTCTGTTTGTAGTTCAGATCGCTGCGAGATTCGCCCTTTTCTAT 677
DB 511 GTTCATCAGATGATGCTTTTGTGTTTGTAGTTCAGAAATTCATTCAGAGATTCGCCCTTCTTCTAT 570
QY 678 GTGTTGTATATATCCCTTTTCGATCTTCTTCCGCTTTCGCTTTCGCTTTCGCTTTCGCTACT 737
DB 571 GTGCTGCTTATGCTTGTGCAATTTTCCACTTGTGCTTGTGCTTGTGGAAGGTTGCCACA 630
QY 738 TCAGAAATACATATCAGAACCTGTTGTGCACTTCTTCCATATATATATATCACCATGACAGA 797
DB 631 ACAAAAGTGTATTTCTGAACCACTGTTGTGTTCTACTTCTATATATATCAACTGTGTA 690
QY 798 GGTCTTGTATCCAGTTTACGTCACCCCAAGGTGTGATTCGCTTTTATCAGGTGTGAC 857
DB 691 ACTGTGCTATCCGCTTTTGTAGTAATCTCAGGTGTGATTCGCTTTTGTATCTGTTGTGAC 750
QY 858 TTTGATGCTCTCTCACTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCT 917
DB 751 GTTGATGCTTAACTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCTTGTGCT 810

Qy	918	TGACATGAAGATCCCTAGCCCAATGCAGCTGATAAGG-----CCAA	956
Db	811	TGATATGAGAGCACTACTGTGTTTGGAAATGAAAGGGAGAAACATTACCCAAATACTTTGAT	870
Qy	957	TCCTGGAAGTCTCCCTACTACGTTACGTTGAAGAGCTTGGCATATTTTCATGTGCTGCCAC	1016
Db	871	TATGGAGTATCCGTACACTGTGACCTTCAGAGGTTTGGCATCTTCAATGTTGCTCTCTAC	930
Qy	1017	ATTGTGTTATCAGCCAAAGTTATCCACGTTCTGCAATGTATACGGAAGGGTTGGGTGGCTCG	1076
Db	931	ATTATGCTATCAGACAAGCTATCCTCGCACACCTTCAGTTTCGAAGGGTTGGGTGTTTCG	990
Qy	1077	TCAATTTGGAAACTGGTGCATATTCACCGGATTCATGGGATTTTATATGAACAATATAT	1136
Db	991	TCAACTTTGCAAGCTGATAATATTTACAGAGTTATGGGATTTATATGAACAATATAT	1050
Qy	1137	AAATCCTATTGTGAGGAACCTCAAGCATCCTTTGAAGGCGATCTTCTATATGCTATTTGA	1196
Db	1051	GAATCCTATTGTACAAAACCTCAACTATCTTTGAAGGGAAACCTTCTATATGCCATTTGA	1110
Qy	1197	AAGAGTCTTGAAGCTTTTCAGTTCCAAATTTATATGTGTGGCTCTGCAATGTTTACTGCTT	1256
Db	1111	GAGAAATCTCAAGCTTCTCTGCCAAATGTATATGTGTGGCTCTGCAATGTTTACTGCTT	1170
Qy	1257	CTTCCACCTTTGGTTAAACATATTTGGCAGAGCTTCTCTGCTCGGGATCGTGAATTTCTA	1316
Db	1171	TTTCCACCTTTGGTTAAACATATCTGCAGAGCTTGTTCGATTTGGTGATCGTGAGTTCTA	1230
Qy	1317	CAAGAATTTGGTGAATGCAAAAAGTTGGCAGATTACTGCAGAAATTTGGAATATGCTCTGT	1376
Db	1231	TAAAGTTGGTGGATATGCCAAACCTGTTGAAGAGTATTGGAGGTTTGGGAATATGCTCTGT	1290
Qy	1377	TCATAAATGGATGGTTTGCACATATATACTTCCGTGCTTCCGCAGCAGAGATACCAAGAC	1436
Db	1291	GCACAAATGCATGGTTGCGCACACATATTTTCCATGCTTAAAGCGTGGTATATCCCAAGGG	1350
Qy	1437	ACTCGCCATTAATCATTTGCTTTCCCTAGTCTCTGCAGTCTTTTCATGAGCTATGCAATCGAGT	1496
Db	1351	TGCTGCTTCAATTAATTTGCATTTCTGGTTTCTGCTGTGTTTCATGAGTTATGCAATGCCGT	1410
Qy	1497	TCCTGTGCTCTCTTCAAGCTATGGGCTTTCTTGGGAATTAAGTTTCAGGTGCTCTTGGT	1556
Db	1411	TCCTTGCCACATGTTCAAAGTTGGGCTTTTATAGGAATTTATGTTTCAGGTTCCCTTGGT	1470
Qy	1557	CTTCATCACAACTATCTACAGGAAGGTTTGG---CTAACCGTGGGGAACATGATCTT	1613
Db	1471	CTTGATCAGCTAATTAATCTCCAAAATAAATACAGAAACTCAATGGTTGGAAATATGATTTT	1530
Qy	1614	CTGGTTTCATCTTCTGCATTTTTCGACAACCGATGTGTGCTCTTCTTTATTTACCACGACCT	1673
Db	1531	TUGGTTCATATTTTGTATTTCTTGGTCAACCAATGAGCGTACTATTGTATCTACCTTGACTT	1590
Qy	1674	GATGAACCGGAAAAGGA	1689
Db	1591	GATGAATAGAAAAGGA	1606

पुस्तक

```

US-10-424-599-111496
; Sequence 111496, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; NUMBER OF FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684

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Db 1439 TAAAGATTGGTGGATGCCAAACCTGTTGAAGAGTATTGGAGGATGTGGATATATGCTCTGT 1498
Qy 1377 TCATAAATGGATGGTTCGACATATACACTCTCCCGTGTGGCGAGCAAGATACCAAGAC 1436
Db 1499 GCACAAATGGATGGTTCGACATATATATCCATGCTTAAGGCGTGGTATACCAAGGG 1558
Qy 1437 ACTCGCCATTATCATTGCTTCCCTAGTCTCTGAGTCTTTCATGAGCTATGCAATGCGAGT 1496
Db 1559 TGGTCTTCATTAATGCAATCCGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1618
Qy 1497 TCCTTGTGCTCTCTCAAGTATACGGCTTCTTCTGGGATATGTTTCAAGTGGCTTGGT 1556
Db 1619 TCCTTGGCACAATGCTCAAGTGTGGGCTTTTATAGGAATATGTTTCAAGTCTTCTTGGT 1678
Qy 1557 CTTTCATCACAATATCTACAGGAAGGTTGG---CTCAACGGTGGGGAACATGATCTT 1613
Db 1679 CTTGATCACTAATATACCTCCAAATAAATAACAGAACTCAATGGTTGGAAATATGATTT 1738
Qy 1614 CTGCTTCATCTCTGCAATTTTCGACACACGATGCTGCTTCTTATATACCAAGACCT 1673
Db 1739 TTGGTTCATATTTGTAATCTTGTGCAACCAATGAGGCTATGTTACTACCAATGACTT 1798
Qy 1674 GATCAACCGAAGGA 1689
Db 1799 GATGAATAGAAAGGA 1814

RESULT 9

US-10-223-076-12
/ Sequence 12, Application US/10223076
/ Publication No. US20030074695A1
/ GENERAL INFORMATION:
/ APPLICANT: Farese, Robert V
/ TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
/ FILE OF INVENTION: Uses Thereof
/ FILE REFERENCE: UCAL-105CIP3
/ CURRENT APPLICATION NUMBER: US/10/223,076
/ CURRENT FILING DATE: 2001-10-29
/ PRIOR APPLICATION NUMBER: 10/040,315
/ PRIOR FILING DATE: 2001-10-29
/ PRIOR APPLICATION NUMBER: 09/339,472
/ PRIOR FILING DATE: 1999-06-23
/ PRIOR APPLICATION NUMBER: 60/107,771
/ PRIOR FILING DATE: 1998-11-09
/ PRIOR APPLICATION NUMBER: PCT/US98/17883
/ PRIOR FILING DATE: 1998-08-28
/ PRIOR APPLICATION NUMBER: 09/103,754
/ PRIOR FILING DATE: 1998-06-24
/ NUMBER OF SEQ ID NOS: 17
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 12
/ LENGTH: 2099
/ TYPE: DNA
/ ORGANISM: Nicotiana tabacum
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (208)...(1806)
US-10-223-076-12

Query Match 36.6%; Score 697; DB 15; Length 2099;
Best Local Similarity 71.5%; Pred. No. 4,6e-194;
Matches 948; Conservative 0; Mismatches 365; Indels 12; Gaps 2;

Qy 376 GATAATAACGGTGGTGGGATATAACGGTGGTGGAGAGGGCGGAGAGGAGGAGGA 435
Db 469 GAGGACGACAGGAATGATAATGTGGATGTGGAGGAAGCAATCAACGGGAACAACA 528
Qy 436 AACGGGATGCTACGTTTACGTTTACGAGTTCGAGCTCATCTCGAGGGCGAGAG 495
Db 529 ACGACGCCGTTTAAATTTGTTACAGGGGGTGGCAACCGACTCACCGGCGGAATCAAGGAG 588

Qy 496 AGTCCACTTAGCTCCGACGCAATCTTCAAAACAGAGCCATGCGCGGATATTATCAACCTCTGT 555
Db 589 AGTCTCTCACTCCGACGCCATTTTCAAAACAGAGTCAAGCGGCTGTTCATCTCTGT 648
Qy 556 GTAGTAGTCTTATTGCTGTAACAGTAGACTCATCATCGAAAACTTATGAAGTATGGT 615
Db 649 GTGGTGGTCTGATGCTGTTTAAACAGCAGGCTGATATTCGAGACTTGAAGTATGGC 708
Qy 616 TGGTGTATCAGAACGGATTTCTGTTTATGTTCAAGATCGCTCGAGATGGCGGCTTTTC 675
Db 709 CTTTAAATTAGGGCTGGCTTTTGGTTTGTAGCTCGAAGTCTGTTGAGGATTTGGCGCTTCTA 768
Qy 676 ATGTTGTATATATCCCTTTCCGATCTTCTTGGTGGCTTTTACGGTTGAGAAATGGTA 735
Db 769 ATGTTGTCTCTCAGTCTCCAAATTTTGGCGCTGCTCTTTTCTTGTGGAGATGGCA 828
Qy 736 CTTTCAGAAATACATATACAGAACCTGTTGCTCATCTTTCTTCATATTATATCAACATGACA 795
Db 829 CAGCAGAGGCAATTTGACTGAGGGTGGGTTGTTACTCTTCATCACTATATACACAGCT 888
Qy 796 GAGTTTGTATCCAGTTTACGTCAACCTTAAGTGTGATTCGTCTTTTATCAGGTGTC 855
Db 889 GCCATTCTGATCCAGTTCTGTTCAATCTTGGTGTGATTCGTCTTTCTGTTTGGTGC 948
Qy 856 ACTTGTATGCTCTCTCACTTGCATTTGTGGCTTAAGTTGGTTCTTATGCTCATCTAGC 915
Db 949 ATATTGATGCTGGTGTGCTTGCATTTGTGGATGAAGCTGGTTCTTACGCACATCAAAAT 1008
Qy 916 TATGACATAAGATCCCTAGCAATGCAGCTGATAGG-----CCAATCCTCAAGTGC 966
Db 1009 CATGATATGAGACAGCTCGCAAGCTTACGACAGGATGAACCTTCAGATGGGATTTTC 1068
Qy 967 TCCTACTAGTTAGCTTGAAGAGCTTGGCAATTTTATGTTGGTGGTGGTGGTGGTGGTGGT 1026
Db 1069 TCTTATCATGTTAGCTTCAAGAGTTTGGCTTACTTTCATGTTTGGCCAACTATATGTTAT 1128
Qy 1027 CAGCCAGATTATCAAGTTCTGCAATGATATACGAGAGGTTGGTGGTGGTGGTGGTGGTGGT 1086
Db 1129 CAGCTTAGCTATCCCACTCCCATGCAATTCGAAAGGTTGGGTTGGGTTGGGTTGGGTTGG 1188
Qy 1087 AAATGCTCATATTCAAGGATTCATGGGATTTATATAAGAACCAATATATAAATCCTATT 1146
Db 1189 AAGCTGTTAATTTTACAGGATTTGATGGATTTATCATGAACAGTACATTAACCCAAAT 1248
Qy 1147 GTGAGGAACCTCAAGCATCTTTGAAAGGGGATCTTCTATGCTATGAAAGAGTGTG 1206
Db 1249 GTGCAAAACTCACACATCTCTTTGAAAGGAAACCTTTTATATGCTATGCAAGAGGATTTG 1308
Qy 1207 AAGCTTTCACTTCCAAATTTATATGTTGGTCTGCAATGTTCTACTGCTTCTTCCACCTT 1266
Db 1309 AAGCTTTGGTTCCAAATTTATATGTTGGTCTGCAATGTTTACTGCTTCTTCTTCTTCTT 1368
Qy 1267 TGGTTAAACATATTGGCAGAGCTTCTCTGCTTGGGGATGCTGAATCTCAAAAGATGG 1326
Db 1369 TGGCTAAATATATCTGGGAACTACTATGTTTGGTGTATCTGAGTCTTCAAGAGATGG 1428
Qy 1327 TGGATGCAAAAGTGGGAGATTTACTGAGATGTTGGAATATGCTGTTTCAATAATGG 1386
Db 1429 TGGATGCAAAAGTGGGAGATTTACTGAGATGTTGGAATATGCTGTTTCAATAATGG 1488
Qy 1387 ATGTTTGCACATATATCTTCCCGTCTTGGCAGCAAGATACCAAGACACTCGCCATT 1446
Db 1489 ATGTTTCTGCACATTTATTTCCCTTGTCTTAAGAAACGGAATTCAAAGGGGTTGCAATA 1548
Qy 1447 ATCATTTCTTCTAGTCTCTGAGTCTTTTCAAGCTATGCTATGCTGAGTCTTCTTCTGCT 1506
Db 1549 CTGATTTCTTCTTGTATGCTGCTTTTCCAGAGCTGTTATGCTGTTTCTTCTTCTTCTT 1608
Qy 1507 CTCTTCAAGCTATGGGCTTTTCTTGGATTTATGTTTCAAGTGGCTTTGCTTCTTCAACA 1566
Db 1609 CTTTTCAGTGGTGGGCAATTCATGGGAATTTATGTTTCCAGGTTCTTCTTCTTCTTCTT 1668
Qy 1567 AACTATCTACAGGAAGGTT--TGGCTCAACGGTGGGGAACATGATCTTCTGCTTCTATC 1623

```

1669 AACCTCTTACAAAACAGTTCACAAAGCTGATGGTGGGCAATATGATGTTCTGGTCTTT 1728
1624 TTCTGCATTTTCGCAACACCGATGTTGCTCTTTTATTACACACCTGATGAACCGA 1683
1729 TTCTGCATTTTCGTCAGCCAAATGTTGCTCTGTATTACACGATGATGAATAGA 1788
1684 AAGG 1688
1789 AAAG 1793

RESULT 10
US-10-223-076-14
; Sequence 14, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: UCAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 63/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 1964
; TYPE: DNA
; ORGANISM: Piralla frutescens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (69)...(1673)
US-10-223-076-14

Query Match 36.3%; Score 692; DB 15; Length 1964;
Best Local Similarity 69.0%; Pred. No. 1.3e-192;
Matches 984; Conservative 0; Mismatches 419; Indels 24; Gaps 2;

QY 285 TTCCGATCATGTTGGAGCTCCGCGCAGCTTAGGGATCGGATTGATTCCGTTGTTAAACGA 344
DB 233 TTCCGAANTGTTGAAACGACGCTAATTTGATCGAAATCTCCGCGCGGAGCCGTGA 292
QY 345 TGACGCTCAGGAAACAGCAATTTGGCCGAGATATAACGGTGGTGGCGATATAACGG 404
DB 293 ATCCGAGAACGAAACAGCAGATTATGTTAAGGAGGAGGGCGGAAAGTCAAGCAGAA 352
QY 405 TGGTGGAGAGCGCGGAGAGGAGAGAAACCGGATGCTACGTTTACGTTATCGACC 464
DB 353 TGGAAACTAGTAATGGCAACGGAACCTGATTTATGGCCGTCAAATTCACATTCAGGCC 412
QY 465 GTCGGTTCAGCTCATCGGAGGCGGAGAGAGTCCACTTAGCTCCGAGCGCAATCTTCAA 524
DB 413 GCGCGCGCTGCTCACCGCAAAAATAAGGAGATCTCTTAGCTCCGAGCCCATCTTCAA 472
QY 525 ACAGAGCCATGCCGANTATTCAACCTCTGTAGTAGTCTTATATGCTGTAAACAGTAG 584
DB 473 ACAGAGCCATGAGCCCTCTTCAACCTTTGTATAGTGTGCTGTGTTGCTGTAATAGCAG 532
QY 585 ACTCATCATCGAATCTTATCAAGTGTGTTGTTGATCAGAACGGATTTCTGCTTAG 644
DB 533 ACTAATAATTGAAATTAATGAAGATGGGTGGCTGATCAAAATCAGGATTTTGGTTAG 592

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QY 645 TTCAGATCGCTCGAGATTGGCGCTTTTCATGCTGTGTATATCCCTTTCSATCTTTCC 704
DB 593 TTCAACATCGCTTAGGGATTGGCCACTGCTAATGTTGTGCTTAGTCTTCCAGTITTCG 652
QY 705 TTTGGCTGCTCTTACCGTTGAGAAATTTGGTACTTTCAGAAATACATATCAGAACTGTTGT 764
DB 653 ACTCGCTTCATTTCTTGTGCGAAGTTGGTGAACATAAATTATATATACCTGAGTGGGTCG 712
QY 765 CATCTTTCTTCATATTATTATACCAAGACAGAGGTTTGTATCCAGTTTACGTCACCT 824
DB 713 AGTCTTTCTTCATGTTTACAATCAACACAGTGAATCTTGTTCAGTTGTTGCTATCT 772
QY 825 AAGGTGTGATTCGCTTTTATCAGGTGTCACCTTTGATGCTCTCCTCACTGCTGATGCTG 884
DB 773 TAGGTGTGATTCGCTGTTCTATCAGGTGTCACGCTAATGCTCTTGTGCTGCACTGTATG 832
QY 885 GCTAAAGTTGGTTTCTTATGCTCATACTAGCTATGACATAAGATCCCTAGCCCAATGACG 944
DB 833 GTTGAAGCTCGTTTCTTACGACATACAACTATGATTTGAGAGTACTTGCAGAAATCACT 892
QY 945 TGATAAG-----GCCAATCCGTAAGTCTCCTACTACCTTAGCTT 983
DB 893 TGATAAGTGGGAAGCTATGTCCAGGTACTGGAACCTCGACTACGCTTATGATGTAAGCTT 952
QY 984 GAAGAGCTTTGGCATATTTTCATGCTCGCTCCCATTTGTTTATCGCCAGTATTCACG 1043
DB 953 TAGAGCTCTGGCATACTTTCATGTTGCTCTCACTGTTGTTTACCGCAAGCTACCTCG 1012
QY 1044 TTCTGCATGTATACGGAAGGTTGGGTGGCTCCTCAATTTGCAAACTGCTCATATTCC 1103
DB 1013 GACAGCTTCGCAITCGGAAGGTTGGTGGTGAAGGCACTAATTTAAGCTGTAATATTCAC 1072
QY 1104 CGGATTCATGGGATTTATATAGAACAAATATATAATCTTATGTCAGGAACTCAAGCA 1163
DB 1073 AGGACTCATGGGATTTATTTATAGAACAGTACATAAAACCCGATCGTTTCAAAATCTCA 1132
QY 1164 TCCTTTGAAAGCGATCTCTATATGCTATTGAAAGAGTGTGCAAGCTTCAGTTCGAA 1223
DB 1133 TCCTCTGAAAGGAACCTTTTATATGCTCAATGAGAGGCTTGAAGCTTCTGTTTCGAA 1192
QY 1224 TTTATATGTGGCTCTGCTGATGTTCTTACTGCTTTTCCACTTTGGTTTAAACATATTGGC 1283
DB 1193 TTTATATGTGGCTCTGCTGATGTTTATTTGTTTTCACCTCTCTGGCTAATATATCTTC 1252
QY 1284 AGAGCTTCTGCTCGGAGATGCTGAATCTTACAAAGATGCTGGAATGCAAAAGTGT 1343
DB 1253 TGAACCTTCTGCTTTGGGGACCGTGAGTTTATAAGGATGCTGGAATGCGAGGACAGT 1312
QY 1344 GCGAGATTACTCGAGAAATGCGAATATGCTGTTCAATAATGATGCTGTCGACATATATA 1403
DB 1313 GGAGGATGACTGGAGAAATGCGAATATGCTGTTCAATAATGATGCTGTCGACATATATA 1372
QY 1404 CTTCCGCTGCTTGGCAGCAAGATACCAAGAACACTTCGCCATTTATCATTTGCTTTCTTAGT 1463
DB 1373 CTGTCCATGCTTACAAAATGCAATACCAAGATAGTGGCAGTTTTCATGCGCTTCTGT 1432
QY 1464 CTCGCAAGTCTTTCATGAGCTATGCTGCGATTCCTGCTGCTCTCTTCAAGCTATGGGC 1523
DB 1433 GTCTCGGATTTTTCATGAGCTGTGGCTGCTGCTCTTCCCAAAATATCAAGTTTGGGC 1492
QY 1524 TTTTCTTGGGATATGTTTTCAGGTGCTTTGCTTTCATCAACAACTATCTACAGAAAG 1583
DB 1493 GTTCTCGGATCATGCTTTCAGGTCTCTCTGTAATGCTGACTAATTTACTTTCAGAA 1552
QY 1584 GTT----TGGCTCAACGGTGGGAAACATGATCTTCTGGTTCTCTTCTGCAATTTTCGACA 1640
DB 1553 GTTCAAAACCTCAATGGTGGCAATATGATGTTCTGGTCTCTCTCTGATCTTTGCTCA 1612
QY 1641 ACCGATGTGGTCTCTTCTTATTACAGCACTGATGAACGAAAG 1687
DB 1613 ACCTATGTGTGTGCTGTACTACACGACTTGATGAATCGAAAG 1659

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RESULT 11

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US-09-770-444-209/c
; Sequence 209, Application US/09770444
; Patent No. US2020023280A1
; GENERAL INFORMATION:
; APPLICANT: Grolach, Jörn
; APPLICANT: Au, Yong-Qiang
; APPLICANT: Hamilton, Carol M.
; APPLICANT: Price, Jennifer L.
; APPLICANT: Raines, Tracy M.
; APPLICANT: Yu, Yang
; APPLICANT: Ramesha, Joshua G.
; APPLICANT: Page, Amy
; APPLICANT: Matthew, Abraham V.
; APPLICANT: Ledford, Brooke L.
; APPLICANT: Woessner, Jeffrey P.
; APPLICANT: Haas, William David
; APPLICANT: Garcia, Carlos A.
; APPLICANT: Kricker, Maja
; APPLICANT: Slader, Ted
; APPLICANT: Davis, Keith R.
; APPLICANT: Allen, Keith
; APPLICANT: Hoffman, Neil
; APPLICANT: Horban, Patrick
; TITLE OF INVENTION: Expressed Sequence
; TITLE OF INVENTION: thaliana
; FILE REFERENCE: 2027 (PARA-016PRV)
; CURRENT APPLICATION NUMBER: US/09/770444
; CURRENT FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: 60/178,502
; PRIOR FILING DATE: 2000-01-27
; NUMBER OF SEQ ID NOS: 999
; SOFTWARE: FastSeq for Windows Version
; SEQ ID NO 209
; LENGTH: 470
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-770-444-209

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Query Match	24.7%	Score 470	DB 9	Length 470
Best Local Similarity	100.0%	Pred. No. 1.5e-127		
Matches 470	Conservative 0	Mismatches 0	Indels 0	Gaps 0
1405	TTCCCGTGCTTGGCAGCAGATACCAAGACACTCGCCATTATCATGCTGTTCCCTAGTC	1454		
470	TTCCCGTGCTTGGCAGCAGATACCHAGACACTGCCATTATCATGCTTCTTAGTC	411		
1465	TCTGCAGCTTTTCATGAGCTATGCATCGCAGTTCCCTTGCTCTCTTCAASCTATGGGCT	1524		
410	CTTGCAGCTCTTTCATGAGCTATGCATCGCAGTTCCCTTGCTCTCTTCAAGCTATGGGCT	351		
1525	TTCTTTGGGATTATGTTTCAGGTGCGCTTTGGTCTTCATCAAACTATCTACAGGAAAGG	1584		
350	TTCTTTGGGATTATGTTTCAGGTGCGCTTTGGTCTTCATCAAACTATCTACAGGAAAGG	291		
1585	TTTGGCTCAACGGTGGGGAACATGATCTTCCTGGTTCATCTTTCGCAATTTTCGACACCG	1644		
290	TTTGGCTCAACGGTGGGGAACATGATCTTCCTGGTTCATCTTTCGCAATTTTCGACACCG	231		
1645	ATGTGTGTCCTCTTTATTACCAAGCCTGTATGAACCGAAAGGATCGATGTCATGAAC	1704		
230	ATGTGTGTCCTCTTTATTACCAAGCCTGTATGAACCGAAAGGATCGATGTCATGAAC	171		
1705	AACCTGTCAAAAATGACTTCTTCCAAAATCTATGCGCTCGTTGGATCTCGCTGATGT	1764		
170	AACCTGTCAAAAATGACTTCTTCCAAAATCTATGCGCTCGTTGGATCTCGCTGATGT	111		
1765	TGTGTGGTTCCTGATGCTAAAAACGACAAATAGTGTATTAAACCATTCAGAAGAAAGAAA	1824		
110	TGTGTGGTTCCTGATGCTAAACGACAAATAGTGTATTAAACCATTCAGAAGAAAGAAA	51		
1825	ATTAGAGTGTGTGATCTGCCAAAAATTTTGGTAGACACGCAAAACCGGT	874		

Db 50 ATTAGAGTTGTTGTATCTGCAGAAAATTTTGGTAGAGACACGCCAATCCCGT 1

RESULT 12

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US-10-223-076-17
; Sequence 17, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: UCAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 1572
; TYPE: DNA
; ORGANISM: Zea mays
US-10-223-076-17

```

Query Match	19.9%	Score 379.4	DB 15	Length 1572
Best Local Similarity	56.0%	Pred. No. 1.8e-100		
Matches 576	Conservative 0	Mismatches 276	Indels 21	Gaps 1
QY	534	TTCTGCTTTAGTTCACAGATCGCTGCAGAGATTGCCCGCTTTTCATGTTGTATATCCCTT	693	
Db	1	TTTTGGTTTAATGCTACATCATTTGCCAGATCGGCCACTGCTAAATGTTGCCCTTAGTCTA	60	
QY	694	TGCATCTTTCCCTTTGGCTGCCTTTACGGTTGAGAAATTTGGTACTCTCAGAAATACATATCA	753	
Db	61	CCCATATTTCCCTTGGTGCATTTGCAGTCGAAAGTTTGCATTCACATCTCGTTAGT	120	
QY	754	GAACTGTTGTCACTCTTCTTCATATATATATACCATGACAGAGGTTTGTATCCAGTT	813	
Db	121	GATCTGCTACTACCTGTTTTCACATCTCTTTTACAAACATTTGAAATTTGATATCCAGTG	180	
QY	814	TACGTCACTCCTAAGGTGTCATCTGCTTTTATCAGGTGTCACTTTTGATGCTCTCTCACT	873	
Db	181	CTGCGTCTCTTAAGTGTGATTTCTGCAGTTTATCAGGCTTTGTGTTGATGTTTATGGCC	240	
QY	874	TGCATTTGTGCTAAAGTTGGTTCTTTATGTCTCATCTAGCTATGACATAAGATCCCTTA	933	
Db	241	TGCATTTGTTGCTGAAGCTTGATCTTTTGCACATACAAACCATGATATAAGAAACATG	300	
QY	934	GCCATTCAGCTGATAAGCCCAATCTCGAAGTCTCTACTACGTTTASCTTGAA	986	
Db	301	ATCACAGCGCGCAAGAGGTTGATATATGAACCTCACCGCGCTGGCATATTTTACAA	360	
QY	987	-----GAGCTTGGCATATTTTCATGGTTCGCTCCACATTTGTGTTATCAGCCA	1032	
Db	361	GCTCCAACTCTTGGGAGTCTAACATCTTCATGATGGCTCCGACATCTGTATCAGCCA	420	
QY	1033	AGTTATCCACGTTCTGCAATATACGGAAGGTTGGGTGGCTCGTCAATTTGCAAAACATG	1092	
Db	421	AGTTATCTCTCGAAACACCTTATGTTAGAAAAGGTTGGCTGGTCAAGTTATCTCTATAC	480	
QY	1093	GTCATATTCACCGGATTCATGGATTTTATAATAGAACAAATATATAATCCTATTGTCAAG	1152	
Db	481	TGTATATTACTTGTGCTCCAGAGTTTCATTTATTTGAGCAATACATAATCCTATTGTTGTC	540	

QY 1153 AACTCAAGCATCTTTGAAAGCGATCTCTATATGCTATGAAAGAGTGTGAAGCTT 1212
 Db 541 AACTCTCAACATCCATTTGATGGAGGATTAAGTCTGCTAGAGACTGTTTGAAGCTC 600
 QY 1213 TCGTTTCCAAATTTATATGTTGGCTTCTGATGTTTCTACGCTTCTTCCACCTTTGGTTA 1272
 Db 601 TCATTACCAAAATGTTTACCTGTTGGCTTTCATGTTTATGCTTTTCCATCTGTGTTA 660
 QY 1273 ACATATTCGCGAGCTTCTCTGCTTGGGGATCGTGAATTTCTACAAGANTGGTGGAT 1332
 Db 661 ACATATCTTCTGCTGAGATTTCTGATTTGGTGACCGAGAAATTTACAAGACTGGTGAAT 720
 QY 1333 GCAAAAAGTCTGGGAGATTAAGGAGATTTGGAATATGCTCTTTCATAAATGGATGGTT 1392
 Db 721 GCAAGAGCAATTTGATGAGTACTGGAGAAATGGAACATGCTGCTGCAATAAATGGATGTT 780
 QY 1393 CGACATATATATCTTCCGTTGCTTGGCGAGCAAGATACCAAGACATTCGCGCATATCAT 1452
 Db 781 CGTATATATATTTTCTGCTGCAATGCGAAATGGTATATCAAGGAAGTGTGCTGTTTATA 840
 QY 1453 GCTTTCTAGTCTCTGCTGCTCTTCTGATGAGCTA 1485
 Db 841 TCGTTCTTTGTTCTGCTGATCTTCAAGGGTA 873

RESULT 13

US-09-770-791-192
 ; Sequence 192, Application US/09770791;
 ; Patent No. US20020062C141

GENERAL INFORMATION:
 ; APPLICANT: Goriach, Jom
 ; APPLICANT: An, Yong-Qiang
 ; APPLICANT: Hamilton, Carol M.
 ; APPLICANT: Price, Jennifer L.
 ; APPLICANT: Raines, Tracy M.
 ; APPLICANT: Yu, Yang
 ; APPLICANT: Rameaka, Joshua G.
 ; APPLICANT: Page, Amy
 ; APPLICANT: Matthew, Abraham V.
 ; APPLICANT: Ledford, Brooke L.
 ; APPLICANT: Woessner, Jeffrey P.
 ; APPLICANT: Haas, William David
 ; APPLICANT: Garcia, Carlos A.
 ; APPLICANT: Kricker, Maja
 ; APPLICANT: Slader, Ted
 ; APPLICANT: Davis, Keith R.
 ; APPLICANT: Allen, Keith
 ; APPLICANT: Hoffman, Neil
 ; APPLICANT: Hurlan, Patrick

TITLE OF INVENTION: Expressed Sequences of Arabidopsis
 ; FILE REFERENCE: thaliana

CURRENT APPLICATION NUMBER: US/09/770,791
 ; PRIOR FILING DATE: 2001-01-26
 ; PRIOR FILING DATE: 2000-01-27

NUMBER OF SEQ ID NOS: 999
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 192
 ; LENGTH: 380

TYPE: DNA
 ; ORGANISM: Arabidopsis thaliana
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (1)-(380)
 ; OTHER INFORMATION: n = A,T,C or G

US-09-770-791-192
 Query Match 19.5%; Score 371; DB 9; Length 380;
 Best Local Similarity 99.5%; Pred. No. 2e-98;
 Matches 371; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1046 CTGCATGATACCGAAGGTTGGGTGGCTCGTCAATTTGCAAAACCTGGTCATATTCACCG 1105

Db 8 CTGCATGATACCGAAGGTTGGGTGGCTCGTCAATTTGCAAAACCTGGTCATATTCACCG 67
 QY 1106 GATTCTGGGATTTAATAAGAAACAATATATAATCCTATTTGTCAGAACTCAAAGCATC 1165
 Db 68 GATTCTGGGATTTAATAAGAAACAATATATAATCCTATTTGTCAGAACTCAAAGCATC 127
 QY 1166 CTTTGAAGCGGATCTCTATATGCTTATTCGAAAGAGTGTGAAGCTTTCAGTTCCAAAT 1225
 Db 128 CTTTGAAGCGGATCTCTATATGCTTATTCGAAAGAGTGTGAAGCTTTCAGTTCCAAAT 187
 QY 1226 TATATGTTGGCTCTGCTATGCTTCTTCTGCTTCTTCCACCTTGGTAAACATATTTGCGAG 1285
 Db 188 TATATGTTGGCTCTGCTATGCTTCTTCTGCTTCTTCCACCTTGGTAAACATATTTGCGAG 247
 QY 1286 AGCTTCTGCTTTCGGGGATCGTGAATTTCTACAAAGATTCGTTGGAATGCAAAAGTGTGG 1345
 Db 248 AGCTTCTGCTTTCGGGGATCGTGAATTTCTACAAAGATTCGTTGGAATGCAAAAGTGTGG 307
 QY 1346 GAGATTACTGGGAATGCGAATATGCTGCTTCTCATTAATGGAATGCTTTCGACATATATCT 1405
 Db 308 GAGATTACTGGGAATGCGAATATGCTGCTTCTCATTAATGGAATGCTTTCGACATATATCT 367
 QY 1406 TCCGTTGCTTGGG 1418
 Db 368 TCCGTTGCTTGGG 380

RESULT 14

US-10-223-076-16

; Sequence 16, Application US/10223076
 ; Publication No. US20030074695A1

GENERAL INFORMATION:
 ; APPLICANT: Farese, Robert V
 ; APPLICANT: Cases, Sylvaine

TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
 ; FILE REFERENCE: UCAL-105CIP3

CURRENT APPLICATION NUMBER: US/10/223,076
 ; PRIOR FILING DATE: 2001-10-29
 ; PRIOR FILING DATE: 2001-10-29

NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 16
 ; LENGTH: 1181

TYPE: DNA
 ; ORGANISM: Zea mays
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: 235, 236, 237, 238, 239, 317, 318, 319, 320, 321, 322, 393,
 ; LOCATION: 394, 395, 396, 397, 398
 ; OTHER INFORMATION: n = A,T,C or G

US-10-223-076-16
 Query Match 19.2%; Score 365.6; DB 15; Length 1181;
 Best Local Similarity 67.5%; Pred. No. 1.7e-96;
 Matches 500; Conservative 0; Mismatches 241; Indels 0; Gaps 0;

QY 947 ATAAGCCCAATCTCGAAGTCTCTACTAGCTTAGCTTGAAGAGCTTGGCATATTTCAATGG 1006

Db 85 ATATGTCGATCTCGAATATGAAGATCCAACTTTAAAGTCTAGTGTCTTCTATGT 144

QY 1007 TCGTCCCAATGTTGTTATACGCAAGTATTCACGTTCTCGCATGTATACGGAAGGTT 1066

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Db 145 TGCCCCCAACACACTTTGTACCAGCAACTTATCTCTCAAACTACATGTATTAGAAGGTT 204
QY 1067 GGCTGGCTCTGCAATTTGCAAACTGTCAATTCACCGGATTCATGGGATTTTAAATAG 1126
Db 205 GGCTGACCCCAACTCATAAAGTCGCTGGNNNNNACAGGCTTGATGGCTTTCATAATG 264
QY 1127 AACAAATATATAATCCATTTGTTCAGGAACCTCAAAAGCATCTTTGAAAAGGCGATCTCTAT 1186
Db 265 AGCAATATATATACCCCAATTTGTGAGAAATTCCAAACATCCACTGAAAAGGGAANNNGA 324
QY 1187 ATGCTATGAAAGAGTCTGAGCTTTTCAGTTCCAAATTTATATGTGTGGCTCTGCATGT 1246
Db 325 ATGCTATGAAAGAGTCTTAAACTCTCAGTGCCCAACATTTATATGTATGGCTTTGCATGT 384
QY 1247 TCTACTGCTCTTCCACCTTTGGTTAAACATATTTGGCAGAGCTTCTCTGCTTGGGGATC 1306
Db 385 TCTATTGCGNNNNNCATTTATGGCTGAAACATTTGTAGCTGAACCTCTCTGTTTGGTGA 444
QY 1307 GTCAATTTCTCAAAGATTGGTGGAAATGCAAAAGCTGTGGGAGATTACTGGGAAATGTGGA 1366
Db 445 GTGAAATCTATAGGACTGTGGAAATGCCAAACTGTTGAAGATCTCGGAGGATGTGGA 504
QY 1367 ATATGCTGTTCATAAATGGAATGTTTCACATATATATCTCCCTGCTTGGCAGCAAGA 1426
Db 505 ACATGCTGTTCATAAGTGGATCATCAGACATATATTTCCATGTATTAAGGAAGGCT 564
QY 1427 TACCAAGACACTCGCCATTTATCTGCTTTCCTAGTCTCTGCAAGTCTTTTCATGAGCTAT 1486
Db 565 TTTCCAGGGGTGAGCTATTTCTAATCTGTTCTCGTTTCAGCTGTATTTCCATGAGATAT 624
QY 1487 GCATCGAGTCTCTTGTGCTCTTCAAGCTATGCGGCTTTCTTGGGATTTATGTTTCAGG 1546
Db 625 GTATGCGGTGCGGTGCCACATTTTCANATCTCGGCAATTTCTGGGATTTTCTGGGATCATGTTTCAGA 684
QY 1547 TGCCTTTGGCTTTTCATCACAAACTATCTACAGGAAGGCTTTGGCTCAACGGTGGGGAACA 1606
Db 685 TACCGTTGGTATTTCTTGACAAGATATCTCCATGCTAAGTTCAAGCATGTAATGTTGGCA 744
QY 1607 TGAATCTGCTGCTCATCTTCTGCAATTTTCGGACCAACCGATGTGTGCTCTTTATATACC 1666
Db 745 ACAATGATATTTTGGTCTTCAGTATAGTCGACAGCGAGTGTGTCTCTCTATATACC 804
QY 1667 ACAGCTGATGAACCGAAG 1687
Db 805 ATGACGTCATGAACAGCGAG 825
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RESULT 15

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US-10-273-438-4
; Sequence 4, Application US/10273438
; Publication No. US2003007257A1
; GENERAL INFORMATION:
; APPLICANT: Faresse, Robert V.
; APPLICANT: Cases, Sylvaine
; APPLICANT: Smith, Steven
; APPLICANT: Erickson, Sandra
; TITLE OF INVENTION: Diacylglycerol O-Acyltransferase
; FILE REFERENCE: UCAL-105Cif2
; CURRENT APPLICATION NUMBER: US/10/273,438
; PRIORITY FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US/10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
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; LENGTH: 629
; TYPE: DNA
; ORGANISM: arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (0)-(0)
; OTHER INFORMATION: Each n residue at position 455, 464, 467, 475, 497, 500, 508,
; OTHER INFORMATION: 514, 519, 536, 543, 544, 576, 583, 584 and 597 can be either a, c,
; US-10-273-438-4
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Query Match 17.7%; Score 336.4; DB 15; Length 629;
Best Local Similarity 94.8%; Pred. No. 4.6e-88;
Matches 381; Conservative 0; Mismatches 16; Indels 5; Gaps 3;
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QY 1047 TGCATGTATACGGAAGGTTGGGTGGCTGTCATTTTGCAAAACCTGTGTATATTCACCGG 1106
Db 1 TGCATGTATACGGAAGGTTGGGTGGCTGTCATTTTGCAAAACCTGTGTATATTCACCGG 60
QY 1107 ATTCATGGGATTTATATATAGAACATATATTAATCTTATTTGTCAGAACTCAAGCATCC 1166
Db 61 ATTCATGGGATTTATATATAGAACATATATTAATCTTATTTGTCAGAACTCAAGCATCC 120
QY 1167 TTTGAAAGGCGATCTTCTATATGCTATTTGAAAGAGTGTGAAGCTTTTCAGTTCCAAATTT 1226
Db 121 TTTGAAAGGCGATCTTCTATATGCTATTTGAAAGAGTGTGAAGCTTTTCAGTTCCAAATTT 180
QY 1227 ATATGTGTGCTCTGCAATGTTCTACTGCTTCTTCCACCTTTGGTTAAACATATTTGGCAGA 1286
Db 181 ATATGTGTGCTCTGCAATGTTCTACTGCTTCTTCCACCTTTGGTTAAACATATTTGGCAGA 240
QY 1287 GCTTCTCTGCTTCCGGGATCTGTAATTTCTACAAAGATTTGGATGCAAAAAGTGTGGG 1346
Db 241 GCTTCTCTGCTTCCGGGATCTGTAATTTCTACAAAGATTTGGATGCAAAAAGTGTGGG 300
QY 1347 AGATTACTT-GGAGAAATGTGGAATATGCTGTGTCATAAAAGG-ATGGTTCCGACATATATA 1403
Db 301 AGATTACTTGGAGAAATGTGGAATATGCTGTGTCATAAAAGTGGATGGGTCGACATATATA 360
QY 1404 C--TTCCCGTCTTGGCAGCAAGATACCAAGACACTCGCC 1443
Db 361 CCTTCCCGTCTTGGCAGCAAGGATTTACCCAAAGACACCCC 402
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Search completed: May 5, 2004, 20:19:39

Job time : 736.533 secs

Result No.	Query			ID	Description
	Score	Match	Length		
1	626	12.1	1942	4	US-09-326-203A-1
2	141.8	2.7	629	4	US-09-103-75A-3
3	135.4	2.6	1446	4	US-09-593-359-1
4	135.4	2.6	1512	4	US-09-593-359-3
5	100.6	1.9	19124	2	US-08-487-826B-13
6	100.2	1.9	10467	4	US-10-204-708-2
7	98.6	1.9	6669	4	US-10-204-708-5
8	95.8	1.8	6669	4	US-10-204-708-6
9	93.8	1.8	6113	4	US-10-204-708-14
10	93.2	1.8	8961	4	US-10-204-708-80
11	91.2	1.8	6070	4	US-10-204-708-10
12	89.6	1.7	6583	4	US-10-204-708-26
13	87.8	1.7	19124	2	US-08-487-826B-13
14	87.6	1.7	11049	4	US-10-204-708-23
15	86.6	1.7	5152	4	US-10-204-708-74
16	86	1.7	6040	4	US-10-204-708-69
17	85.8	1.7	6306	4	US-10-204-708-50
18	85.6	1.6	6317	4	US-10-204-708-11
19	83.4	1.6	10619	4	US-10-204-708-4
20	84.6	1.6	5152	4	US-10-204-708-73
21	83.6	1.6	7218	1	US-08-232-463-14
22	82.4	1.6	6866	4	US-10-204-708-20
23	82	1.6	6124	4	US-08-213-4-9B-3
24	81.8	1.6	5666	4	US-10-204-708-23
25	81.2	1.6	1511	1	US-07-991-867B-8
26	81.2	1.6	1511	1	US-08-107-75A-8
27	81.2	1.6	1511	2	US-08-544-332-8

Db 301 ATCTGTAGAGGCTCGTCAGGAAATCGAGATCGGATTCCTTAAAGGACTCTTCTCT 360
 Qy 1885 CTGGTTCGATATTAATCTCTCTCGGATGATGTTGGAGCTCCCGCCGAGCGTAGGGATC 1944
 Db 361 CTGGTTCGATATTAATCTCTCTCGGATGATGTTGGAGCTCCCGCCGAGCGTAGGGATC 420
 Qy 1945 GGATGATTCGGTTCCTTAAAGATGAGCTCAAGGAAACAGCCAAATTTGGCCGGAGATAATA 2004
 Db 421 GGATGATTCGGTTCCTTAAAGATGAGCTCAAGGAAACAGCCAAATTTGGCCGGAGATAATA 480
 Qy 2005 ACGGTGGTGGGATATTAACGTTGGTGAAGAGCGCGGAGAGAGGAAAGCGCG 2064
 Db 481 ACGGTGGTGGGATATTAACGTTGGTGAAGAGCGCGGAGAGAGGAAAGCGCG 540
 Qy 2065 ATGCTAGCTTTACGTTACGTTACGTTACGTTACGTTACGTTACGTTACGTTACGTTAC 2124
 Db 541 ATGCTAGCTTTACGTTACGTTACGTTACGTTACGTTACGTTACGTTACGTTACGTTAC 600
 Qy 2125 TTAGCTCGAGCGCAATCTTCAACAG 2150
 Db 601 TTAGCTCGAGCGCAATCTTCAACAG 626

RESULT 2
 US-09-103-754A-3
 ; Sequence 3, Application US/09103754A
 ; Patent No. 6344548
 ; GENERAL INFORMATION:
 ; APPLICANT: Farese, Robert
 ; APPLICANT: Cases, Sylvaine
 ; APPLICANT: Smith, Steven
 ; APPLICANT: Erickson, Sandra
 ; TITLE OF INVENTION: Diacylglycerol O-acyltran-
 ; sferase
 ; NUMBER OF SEQUENCES: 6
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Bozicevic & Reed
 ; STREET: 285 Hamilton Avenue, Suite 200
 ; CITY: Palo Alto
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94301
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSeq for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/103,754A
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER:
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Field, Bret E
 ; REGISTRATION NUMBER: 37,620
 ; REFERENCE/DOCKET NUMBER: 6510-105p
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650 327 3400
 ; TELEFAX: 650 327 3231
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 629 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 US-09-103-754A-3

Query Match 2.7%; Score 141.8; DB 4; Length 629;
 Best Local Similarity 95.4%; Pred. No. 6.5e-19;

Matches 146; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
 Qy 3453 TTACATTTTGGCAGTATATAATCTTATGTTCAGGAATCTCAAAGCATCTTTTGAAGGGC 3512
 Db 72 TTATAATAGAAACAATATAATAATCTTATGTTCAGGAATCTCAAAGCATCTTTTGAAGGGC 131
 Qy 3513 ATCTTCATATGCTATTGAAAGAGTGTGAAGCTTTTCAGTTCCAAATTTATATGTGTGC 3572
 Db 132 ATCTTCATATGCTATTGAAAGAGTGTGAAGCTTTTCAGTTCCAAATTTATATGTGTGC 191
 Qy 3573 TCTGCATGTTCTACGCTCTTCTTCCACCTTTGGT 3605
 Db 192 TCTGCATGTTCTACGCTCTTCTTCCACCTTTGGT 224

RESULT 3
 US-09-593-359-1
 ; Sequence 1, Application US/09593359
 ; Patent No. 6552250
 ; GENERAL INFORMATION:
 ; APPLICANT: Laroche, Andre J.
 ; APPLICANT: Nykiforuk, Cory L.
 ; APPLICANT: Weselake, Randall J.
 ; TITLE OF INVENTION: Diacylglycerol O-acyltransferase
 ; FILE REFERENCE: 24015US0
 ; CURRENT APPLICATION NUMBER: US/09/593,359
 ; CURRENT FILING DATE: 2000-06-14
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 1
 ; LENGTH: 1446
 ; TYPE: DNA
 ; ORGANISM: Brassica napus
 ; FEATURE:
 ; OTHER INFORMATION: DGAT2
 ; NAME/KEY: CDS
 ; LOCATION: (82)..(1107)
 US-09-593-359-1

Query Match 2.6%; Score 135.4; DB 4; Length 1446;
 Best Local Similarity 92.8%; Pred. No. 1.4e-17;
 Matches 142; Conservative 0; Mismatches 11; Indels 0; Gaps 0;
 Qy 3453 TTACATTTTGGCAGTATATAATCTTATGTTCAGGAATCTCAAAGCATCTTTGAAGGGC 3512
 Db 524 TTATAATAGAAACAATATAATAATCTTATGTTCAGGAATCTCAAAGCATCTTTGAAGGGC 583
 Qy 3513 ATCTTCATATGCTATTGAAAGAGTGTGAAGCTTTTCAGTTCCAAATTTATATGTGTGC 3572
 Db 584 ACCTTCATATGCTATTGAAAGAGTGTGAAGCTTTTCAGTTCCAAATTTATATGTGTGC 643
 Qy 3573 TCTGCATGTTCTACGCTCTTCTTCCACCTTTGGT 3605
 Db 644 TCTGCATGTTCTACGCTCTTCTTCCACCTTTGGT 676

RESULT 4
 US-09-593-359-3
 ; Sequence 3, Application US/09593359
 ; Patent No. 6552250
 ; GENERAL INFORMATION:
 ; APPLICANT: Laroche, Andre J.
 ; APPLICANT: Nykiforuk, Cory L.
 ; APPLICANT: Weselake, Randall J.
 ; TITLE OF INVENTION: Diacylglycerol O-acyltransferase
 ; FILE REFERENCE: 24015US0
 ; CURRENT APPLICATION NUMBER: US/09/593,359
 ; CURRENT FILING DATE: 2000-06-14
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 1512
 ; TYPE: DNA


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; ORGANISM: Brassica rapus
; FEATURE:
; OTHER INFORMATION: DQAT1
; NAME/KEY: CDS
; LOCATION: (1)..(1512)
US-09-593-359-3

Query Match          2.6%; Score 135.4; DB 4; Length 1512;
Best Local Similarity 92.8%; Pred. No. 1.5e-17;
Matches 142; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

QY 3453 TTCAATTTGGGAGTATATAAATCTATTGTCAGAACTCAAGCAATCCTTTGAAAGCG 3512
Db 929 TTATAAGAGCAATATAAATCCTATTGTTAGGAAGTCAAGCAATCCTCTGAAAGGG 988

QY 3513 ATCTTCATATGCTATTGAAGAGTGTGAAGCTTTCAGTTCGAATTTATATGTGGC 3572
Db 989 ACCTTCATATGCTATTGAAGAGTGTGAAGCTTTCAGTTCGAATTTATATGTGGC 1048

QY 3573 TCTGCAATGTTCTACTGCTTCTTCCACCTTTGGT 3605
Db 1049 TCTGCAATGTTCTACTGCTTCTTCCACCTTTGGT 1081

RESULT 5
US-08-487-826B-13
; Sequence 13, Application US/08487826B
; Patent No. 5993827
; GENERAL INFORMATION:
; APPLICANT: Sim, Kim L.
; APPLICANT: Chitnis, Chetan
; APPLICANT: Miller, Louis H.
; APPLICANT: Peterson, David S.
; APPLICANT: Su, Xin-zhauc
; APPLICANT: Wellens, Thomas E.
; TITLE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX
; TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE
; NUMBER OF SEQUENCES: 45
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe Martens Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: California
; COUNTRY: US
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/487,826B
; FILING DATE: 10-SEP-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Israel, Ned
; REGISTRATION NUMBER: 29,655
; REFERENCE/DOCKET NUMBER: NIH21.001CP1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 235-8550
; TELEFAX: (619) 235-0176
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19124 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-08-487-826B-13

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Query Match 1.9%; Score 100.6; DB 2; Length 19124;

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Best Local Similarity 46.2%; Pred. No. 1.8e-10;
Matches 595; Conservative 0; Mismatches 669; Indels 23; Gaps 7;

QY 183 TATACTAAAGAAAATTTTGTGTTTGTCTGTTTGAAGCATATGTTTGTAACTTAAA 242
Db 5832 TAAAAATAGATACTAAACAATATGCAATATACAGAAATAATTTTGTATATAATATA 5891

QY 243 AAAATATGATTTGTTAAATCTTAAATAATGAGAGTACACATCAAAATCTCGAGCATATCC 302
Db 5892 TATATAATATATATAAAGACATTAATAAATCTATCTAATAGGTAATAGTTTATATATATC 5951

QY 303 AAAACCGTATTTCATAGACCGAGTGTGAGAAAT--CAAACTAGAGAGATAATGTGATTTTAAA 360
Db 5952 ATCCCTTTTATTTATTAATTTTGTGTTTGTCTGTTTGTCTGTTTGTGTTTGTATATA 6011

QY 361 ATATCGTATCTCCAAATCAATCACTTAGAAGATATATGTAATTTCTTTATGTGCTACATAAA 420
Db 6012 ATATAACAAATATAAACAATATCAGTATTTGGAATATAAATAAATTTATCTACATATA 6071

QY 421 TAAATATATATATATATATATATATATCTGTATATATATCTTGTGACAAAAATTTGCCA 480
Db 6072 TGCATATATATATATATATATATATATATATATATATATATATATATATATATATATGA 6130

QY 481 GTCAAAACCATGACTGAATCAAACTATAAGTCCGATTGGAATCAAACTATAAGTCGGATG 540
Db 6131 TTTTATATCTATTTTATATCATGCAATTTTATATATTTTATGATATATCTTTTAAAGAT-- 6186

QY 541 AGTATTAATTTCCAAATAGTTTCTATATCTTTTACAAACCGGAAATAGATATATATAGATAC 600
Db 6187 ATTATTAATTTTATATAGTAGCATATATGTTTATATATATATATATATATATATATATAT 6246

QY 601 CAAAAAGTAGATTGTTGTATATTTATTAGAAGATTTGGAATTTTCATCATTTATCAGGATCT 660
Db 6247 TATAAATATATAGAACATGAACATTTTATTATAAATCACTATATTTGAATATATATATTTAT 6306

QY 661 AAAGTACTTCCCTAAATTAATCAATGCTGTTTGAAGAAAGCTCAATGAAATGTTTGAATTTG 720
Db 6307 AATGTGATTTTACTTTA-----TTTTTTTATATATACAAATAAATTTTGAATTTCA 6359

QY 721 GAAAGTTTATTAATTCGGATCTTTTTTTTTTGTGTCGCCCAAAACATTTTATTTTA 780
Db 6360 TAAAAATGATGAATACATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 6419

QY 781 TTACAAATATCAACTTATCTTACTACTAATCAATTTCTATCTTTTGTATACCAACAAAT 840
Db 6420 ATATAATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 6479

QY 841 CATTTCATATTTCTATTTTGTATTTTAAAGAAAACACTATTTTACAGTTTACAAAATTTATA 900
Db 6480 TGAATGCTATATATATATATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 6539

QY 901 AGGAT--TGTGTTTGAAGAAAAGTACAGTTGAAATCTTTTGTGTTTGTCAAAATATAAATG 959
Db 6540 ATAAATATCTACTTTTAAATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 6599

QY 960 ACTTTTATATATATATATGACTTATTTGAACATCAATTACAGAAATTTATCATCTACAAACT 1019
Db 6600 ATATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 6659

QY 1020 TTCCAAAGTTTATAAATAAT--ACATTTTCAAAGACTTATTTGTTCTTCTTAAATAATTTCTAA 1078
Db 6660 TGTCTCTTTTGTATCTCTAATATATATATATATATATATATATATATATATATATATATAT 6719

QY 1079 AAGTGAATCAAAGACTACCAATATATATATATATATATATATATATATATATATATATAT 1138
Db 6720 AAATATACATATATATATATATATATATATATATATATATATATATATATATATATATAT 6779

QY 1139 AATAAATAATTTGACTTAAATAGTTTGAAGAGCAATTTGATTTGATATATATATATATAT 1198
Db 5780 TATATGTTTGTATTTTGTGATTTTCTTCAATTTATAAATTTTCTTAAATAAATAAATAA 6839

QY 1199 TGTACATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 1251

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RESULT 7
US-10-204-708-5/c
; Sequence 5, Application US/10204708
; Patent No. 6677731
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; TITLE OF INVENTION: By Assessing DNA Methylation
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204,708
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 5
; LENGTH: 6669
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-5

Query Match      1.9%; Score 98.6; DB 4; Length 6669;
Best Local Similarity 47.6%; Pred. No. 3.3e-10;
Matches 324; Conservative 0; Mismatches 354; Indels 3; Gaps 1;

QY 803 TACTACTAAATCAATTCATATCTTGTATACCAACAAATCATCTTCATATCTTCTTTTGAAG 862
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 863 TTTAAGAAACACATATTTACAGTTACAGTTACAAATATATTAAGGATTTGTGTTAGAAAAA 922
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1707 AATATATCTAACAAATTCACACTTAAATAATATATAATCTTTAAACCCCAACATATA 1648
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 923 AGTACAAAGTGTGATCTTTTGTGCAATATATAAATGACATTTTATATATATATGACTT 982
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1647 TTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTA 1588
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 983 ATTGAACATGATTACAGAAATTAATCTATCAAAACCTTCCAAAGTTTATATAAATACAT 1042
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1587 TATTAACATTTTCTACACCATCCTACCATCAATTTCTAAACCTTTTTCATCTTCCCA 1528
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1043 TTTCAAGACATATAGTCTTCTTTAAATATTTCTTAAAGTGATCAAGACTACCATAT 1102
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1527 AATTAAACCTTACTTAATTTTATTTTATTTATTTATTTATTTATTTATTTATTTATTA 1468
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1103 AATTCAAGAAAGTAGAAGTGTGATTTCTTTTGTGCAATATATAAATGACTTAAATAGT 1162
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1467 ACTTCAAAATTTCTAAATAATCCCAAACTATCATCTATAAAATTTTCTTAAATAAAT 1408
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1163 TTGGAAGCATTTGATTTGATTTATAGATTTGATTTGATTTGATTTGATTTGATTTGATTT 1222
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1407 TATTACCTTCTATATAAACAACATACATATAAATAAATAAATAAATAAATAAATAAATAA 1351
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1223 ATAAATAATACATTTTCAAAATGCTATATCAGTTCTTCTTAAATAATTTTCACTTAAATA 1282
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1350 TTAACATAAAAAAATTTAATAAAAAATTCGTTTACACTAATAAATAAATAAATAAATAA 1291
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1283 CACTCAATATAGATAAATTTTATTTGATATACATACCAATCTGTAACAGATTTTGACAA 1342
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1290 CCCAACAACTTACAACTCTCAATATTTAACCAATATAAATAAATAAATAAATAAATAA 1231
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
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QY 1343 AAAAAAATAATGAAATGAGATGAGACACAAATAATCAACAGAGATCTTTATGC 1402
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1230 ATAAAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 1171
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1403 AAAAAAATAATGATATACATACATATAAACCATTATTTGATTTTAAATAAATAAATAA 1462
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1170 AACTTATCTTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 1111
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1463 AAAAAATATCCCAACACCGCTT 1483
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1110 AAAAAAATAATTAATCTT 1090
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

RESULT 8
US-10-204-708-6/c
; Sequence 6, Application US/10204708
; Patent No. 6677731
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; TITLE OF INVENTION: By Assessing DNA Methylation
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204,708
; CURRENT FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 6
; LENGTH: 6669
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-6
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Query Match      1.8%; Score 95.8; DB 4; Length 6669;
Best Local Similarity 46.3%; Pred. No. 1.2e-09;
Matches 636; Conservative 0; Mismatches 692; Indels 45; Gaps 8;

QY 133 TTGACTTAAATAGCTATTGATGTGCAAAAAATGTAATTTAGTTTAAATTTACTTAAG 192
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 5013 TTAACCTTTAAAACTATACATTTTAAATTTTAAATTTTATTAATATTTTATCAAAA 4954
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 193 ABAATTTTCAATTTGCTGTTGTTTAAAGCATGTACTGTAAACCTTAAAAAATATGTA 252
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 4953 AAAAAAACAACACATCTACATAAACAATAAATAAATAAATAAATAAATAAATAAATAA 4894
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 253 TTGTTAATCTTAAAAA-----TGTAGAGTACACATCAAAATCTCGAGCATAA 300
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 4893 AACAACTTTAAAAAATCTACTTACTTAAATTTTAAATTTTCAAAATTTCAAACTAA 4834
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 301 TCAAAACCGATTTCTAGACCGGATGTGAGATCAAAATAGAGATAATGTGATTTTTTAAA 360
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 4833 CCTAAACCTTAAATAAATAATATACTAAATAAACCATAAATAAATAAATAAATAAATAA 4774
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 361 AT-----ATCGTATCTCAATCTCAATCTCAATCTCAATCTCAATCTCAATCTCAAT 406
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 4773 TTTCAAAAAAATCTTCAATTTGTTTAAACATATCTACAAATAAATAAATAAATAAATAA 4714
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 407 ATGTGCTACATAAATAAATAATATATATATATATATATATATATATATATATATATAT 466
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 4713 AAATCAATTTAAAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 4654
DB ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
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QY 467 ACAA--AAAATGCCAGTCACAAACCATGCTGAATCAAACTATAAGTCGGATTGATCA 524
Db 4653 AAAA--CTAACTATAATACCAAAACAAACAACTTTATATATATCTTAACCCACACACA 4594
QY 525 AACTATAAGTCGGATGAGTATTAATTTCCATTTATGTTTCTATCTTTTACAAACCGGAAA 584
Db 4593 TTTTATAAAATCCCAACAAACAACTAACTTTAAATATAAATAAATAAATAAATAAATTC 4534
QY 585 TAGATATATAGATACCAAAAGTAGATTTGGTATATATTTAGAGATTTGGATTTTC 644
Db 4533 TCGAAATACAAATATCTTAAAAAATAAATAAATAAATAAATAAATAAATAAATAAATTC 4474
QY 645 ATCAATATCAGATCTAAGTAGTCTCCCTAATTAATCATGTCGGTTGAAAAGCTCAAT 704
Db 4473 ATATTCCTTAAATAAATTTAACTTTAAATAAATAAATAAATAAATAAATAAATAAATTC 4414
QY 705 GAATGTTGAAATTTGGAAGTTTATTAATTCGGATCTTTTCTTTTGGTTCGTCGCC 764
Db 4413 CTACTTAATAATATCTAATATCTAATAAATCCAAAAAATAATTTTATATATATAT 4354
QY 765 AAACATTTTATTTATACAAATTAATCACTTATCTTACTTACTTAATCAATTCATATC 824
Db 4353 TTAATAAATTA--AAAAAATCTTAATATCTTAACACATAAATAAATAAATAAATAAATTC 4297
QY 825 TTTGATACCAACAAATCATTTTCATATCTTATTTTGATGTTTAAAGAAACACTTTTACCA 884
Db 4296 TCTATATTCACAAATTAACAAATTTTAA--AACATCTTAACACCCAAATAATTTTACTA 4239
QY 885 GTTCAAAATATTTAAGGATTTGTTTGTAGAAAAAAGTACAAAGTTGAAATCTTTTGTG 944
Db 4238 AAAAAAATCAATATAAAAAAACCATAACAAAAAATCTAAAAATTAACGAAAAATACT 4179
QY 945 TCAATATTAATAATGACITTTTAAATATTAATTAATGATCTTTGAACTGATACAGATTA 1004
Db 4178 AATAAAAAAATA--ATCATAAATTAATAATAAACCCTCATATAAAAAAATAATATAC 4127
QY 1005 ATCACTCAAAAACTTCCAGTTTATTAATAATACATTTCAAGACTTAAAGTCTTCTCT 1064
Db 4126 AGGATATATATCTTTTAAATATTAATAATAAATTAACGCAAAATTAATAAATTAACAT 4067
QY 1065 TAAATATTTCTPAAAGTGATCAAAAGACTA--CCATATATAATTCAGAAAAAGTAGAAGTT 1123
Db 4066 AAAAAAATCTTTTATATATATCTCTCTACCCATCTAAATTTTATATAAATAAATAAT 4007
QY 1124 GATTTCTTTTGTCAATTAATTAATGACTTTAAATAGTTTGGAAAGCCATTTGAACTTGA 1183
Db 4006 TATCTCAACTTTCAAACTAAAAAATAATAATAAATAAATTTCAAAAAAATAATTTATAACA 3947
QY 1184 TTATAGAAATGATAATGTACATAAAAAAATTTCCAGTT--TATATAATATCATTTTTC 1240
Db 3946 ATAAATTAATAAATAATACGAAACAACTATCTTAAATAACCATATACAAATAATCCAAAA 3887
QY 1241 AAATGCTATATCAGTTCTTTTAAATATTTTCACTPAAAAAATCACTCAAAATATAGATAA 1300
Db 3886 AAATATAACAAACACATTTACGAAATTAATAACAATAAATAAATAAATAAATAAATAA 3827
QY 1301 ATTATTTGAAATTAACATACCACTGTAAACAGAAATTTGACAAAAAATAAATAAATAA 1360
Db 3826 ACTTTTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 3767
QY 1361 ATGAAGAATGAAGACAAAAATAAATCACAGAGGATCTTATGCAAAAAAATAATATATCA 1420
Db 3766 TCAACAAATAATTAATTTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 3707
QY 1421 ACAATAACCAATTTGATTTTAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 1473
Db 3706 TTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 3654
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RESULT 9

US-10-204-708-14/c

; Sequence 14, Application US/10204708

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; Patent No. 5677731
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; TITLE OF INVENTION: by Assessing DNA Methylation
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204,708
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 14
; LENGTH: 6113
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
; US-10-204-708-14
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Query Match 1.8%; Score 93.8; DB 4; Length 6113;
Best Local Similarity 44.9%; Pred. No. 2.8e-09;
Matches 617; Conservative 0; Mismatches 732; Indels 24; Gaps 6;

QY 140 AAAATAGCTATTGATGTCGAAAAAATGATTTTAGTTATTAATAATTAATAAAGAAAAATTT 139
Db 6002 AAAATACATACCTCAACATAAAAAATCTATATCTTCAATATAATAAATAAATAAATTT 5943
QY 200 TTGATTTGCTCTGTTGTTAAGCATATGTTTGTAACTTAAAAAATATGTTATTTTAA 259
Db 5942 AAAAATTAGCTTTTTTAAACATCATTTTATAATAACAATAACAATAATAATATATATA 5883
QY 260 TCTTAAAAATGTAGAGTACACATCAAACTCTGAGCAATAATCAAAACCGTATTCTCA--T 316
Db 5882 TAAATTTACAAACATATCATATCTCTATCTAATAAACTACAAATCAATAATAATTT 5823
QY 317 AGACCGATGTGAGATCAAAATAGAGATAATGTGATTTTAAAAATATCGTATCTCCAAA 376
Db 5822 TTAAAAATAACCAATAAAAAATCTCTATAAATTAATAATCAAACTAATTTTAACTAAAT 5763
QY 377 TCAATCACTTAGAAGATATGTAATTTCTTTATGTGTACATAAATAATAATATATATA 436
Db 5762 CCCATCTCTTAAATACCTACGTTATCCAAATTTATCTCTTAAATAAATAAATAATCTTTA 5703
QY 437 TATATATATATATCTTTGTATATATGTTGACAAAAAATTTGCCAGTCAAAAACCATGACT 496
Db 5702 TAAACTTAAATTAATTAATTAATTTTCCGTTTACAAATA-----AACTAAACTACT 5650
QY 497 GAATCAAACTATAGTCGGATTTGAATCAAACTATATAGTCGGATGATTTATTTCCATT 556
Db 5649 ATAAACCAACACTCACTCTTTAAATATATATCTCAATAAAAAATAAATACTTATTTTCA 5590
QY 557 ATGTTTCTTATCTTTACAAACCGGAAATAGATATTTATAGATACCAAAAAAGTAGATTG 616
Db 5589 CGAAACCCATATATAAATTTTCTTACAACTATATTTTCAATATCAACCAAACTACAAATA 5530
QY 617 TGTATATTTAGAGATTTTGGAAATTTTCATATTTATCTAGGATCTAAGAGTACTTCCCTAAT 676
Db 5529 ACTAACTCAAACTACCTTTTAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 5470
QY 677 TAAATCATGTCGGTTGAAAAAGCTCAATGAATGTTTGAATTTGGAAAGTTTATTAATTT 736
Db 5469 ATACTAATCAACAATAAAAAA-----AAACAACTACTAATATATACGTAATAAATACTCAAAA 5413
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QY	737	CGGATCTTTTGTGGTGTCGCCCAACATTTTTATTATTATACAATAATCAACT	796
D5	5412	CATTATACTAATAAATAAAAAAACCAAAATCCAAAANNTACNATAATAATAATACATAT	5353
QY	797	TATCCTTACTACTAATCATTTCAATCTTTGATACCAGAAATCATTTTCATATTTCTATT	856
D5	5352	AAAACAATCTCAAAATAAAAAAANAATAATAACAAAAAACAATCAATATTTACTAAAT	5293
QY	857	TTGATGTTTAAAGAAAACACTATTTTACCAGTTTCAAAATATTATAAGGATGTTGTTTGA	916
D5	5292	TAAAAATAAAAAANAATTAATACTACAAAAAATAACATAAAAAAATATTCAAAATAAC	5233
QY	917	AAAAAAGTCAAGTTGAATTCCTTTTGTCAAATATAAAATTTGAC-TTTTAAATATAAA	975
D5	5232	GAAACTATCTATATCCTTAATTTTAAATATTAATTACATCAATCACATATATTCAAATTTA	5173
QY	976	TTGACTTATCGAAGATTAACAGAAATTAATCATCTACAAAACCTTCCAAGTTTAATA	1035
D5	5172	TAAACTATACACCAATTTTAAAAATTAATTTTACTATATTTTAAAAATAAAATCTAAAA	5113
QY	1036	AATACATTTCAAAGACTATTAGTTCTTCTTAAAAATTTCTTAAAGTGTCAAGACTAC	1095
D5	5112	AAACCACTAATAACAACAACAABAACATAAAAAAANAATAAAATACCAACACACCTA	5053
QY	1096	CACATATTAATTCAGAAAAAGTAGAAGTTGATTTCTTTTGTCAAAATAAAATATGACTTA	1155
D5	5052	CTAAAAAACAATAAAATTAAAAAAACTAACCAATACCAANTATTATATAAAATATAAACAA	4993
QY	1156	AAATAGTTTGGAAAGCCATTGAACTTGNATTATAGNAATTGATATGTCATATAAAAAATTC	1215
D5	4992	CTAAAAATCTCATACCTCCTTAATAAAAAAATAAAACGATACCACCACTTAAACAATTC	4933
QY	1216	CAAGTTTATAAATAACATTTTCAAATGCTATATCAGTTCTTCTTAAAAATTTTCACT	1275
D5	4932	TTAAAAAATTAACATACACCTTAACAAATTAATCAACCATTCGATTTCTAAATATTACA	4873
QY	1276	AAAAAACACTCAATATAGATAAATTTTCTGAAATAACATACCAACTGTAAAAAGAAT	1335
D5	4872	TCAAAAAATAAATAACATAAATCCATACAAAAACTTTACACATAAATTTTCATAATTTAT	4813
QY	1336	TTGACAAA-----AAAAAANAANAATGAATGAAGATGAGACAAATAAATCAACA	1389
D5	4812	TTATAATAACCCCTAATTHAAACACCCCAATATCTTATAACAAATAAATAAATAAACA	4753
QY	1390	GAGGATCTTAT---GCAAAAAATATATCAATAACAAATAAACCATATTCATATTTTITA	1445
D5	4752	AATTATAATATACATACATAAATAATTTACTCAACATTAATAAAAAAATAAATCACTAA	4693
QY	1446	AAATAAATAAANAACHGAANAATATCCAAACACCGCTTTTCAATTAANAATCT	1498
D5	4692	TAAACAAAAACATAAATAAATCTCRAAATAATTTACTAAATAAATAAANAACCT	4640

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RESULT 10
US-10-224-708-80/c
; Sequence 80, Application US/10204708
; Patent No. 6677731
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; TITLE OF INVENTION: by Assessing DNA Methylation
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204.708
; CURRENT FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7

```

[illegible]

5683	DB	CTTACCTTCAAAAACCTTAAAAACAACCTCTAAAAAATTATTTATTATTAATATCAATATA	5624
1076	QY	TAAAGTGTCAAAGCTACACACATATAATTCAGAAAAAGTAGAAGTTGATTTCTTTTTCG	1135
5623	DB	AAAAATAAAAAAACAATAATTATTACGAATATATATAAAAAAAACCGAATATCCGTATTATTA	5564
1136	QY	TCAATAAATAATTTGACTTAAATAGTTTGGAAAGCCATTGAACTTGATTATAGAATTGA	1195
5563	DB	TAAATATAAAAAAATAAATTTCTCAACTATTATATAAAATATCAAACTAAAAATAAATAAAA	5504
1196	QY	TAACTGACATAAAAAAATTCCAAGTTTTATATAAATACNTTTTTCAAATGCTATATACGT	1255
5503	DB	AATTAATTATTATAAAATCTCTATAAAAAATAAATACTTAATATTATAAAATATAAAAAATA	5444
1256	QY	TCTTCTTAAAAATATTTCACATAAAAAACACTCAATATATAGAAATTAATTTATTCGATTAACA	1315
5443	DB	AATACTAGAAAAAATACCTTATTCATAAATAACCATAAAAAATAAATAATTAATTTAT -	5385
1316	QY	TACCAACTGTAAAAACAGAAATTGCAAAAAAATAAAAAAATAAGAAATGAAGATGAAGACA	1375
5384	DB	TATTAATATTATACATTAAATCCAAAAATCAAAAAAATAATTAACAAAAATATCTATTAT	5325
1376	QY	AAAAATAAATCACCGAGGATCTTATGCAAAAAAATATATCAATACACAAATAAAACCATTT	1435
5324	DB	AAAAATCTTAAAAAATAAATTACAAAAATCTACATATTTTAAATATCAACAATCTC	5265
1436	QY	GATATTTTAAAAATAAATAAAAAACAGAAAAA	1467
5264	DB	TACATATATATAAAAAATATAAAAAACAAA	5233

```

RESULT 11
US-10-204-708-10/c
; Sequence 10, Application US/10204708
; Patent No. 667731
; GENERAL INFORMATION:
; APPLICANT: CLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; TITLE OF INVENTION: by Assessing DNA Methylation
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204,708
; CURRENT FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PC7/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 10
; LENGTH: 6070
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-10

```

	Query Match	1.8%;	Score 91.2;	DB 4;	Length 6070;
	Best Local Similarity	45.7%;	Pred. No. 8.9e-09;		
	Matches 497;	Conservative	0;	Mismatches 563;	Indels 28; Gaps 4;
Qy	393	TAATGTAATCTTTATGTGCTACATAAAATATATATATATATATATATATATATCTT			452
Db	2688	TAAAAATTATTTTCAACAATAATACAAATTATATAAATAAACTACAAATTATCTATTCA			2629
Qy	453	GTATATATGCTTTGGACAAAAATTTGCCATCAAAAACCATGACTGAATCAAACTATAAGT			512

Db	2628	TCTATTATAAACAATCTAAATTTTTTTCCTTTAACTATTATAATAAACTACTATAAAT	2569
Qy	513	CGGATTGAATCAAACCTATAAGTCGGATGAGTATTAAATTTCCCATATATGTTCTCTATACITTA	572
Db	2568	CTTTTATTAATAAATAAACAATTCATTTCTTAAATAATAATATCTAAAAATAAAATTTCTAAA	2509
Qy	573	CAACCCGGAATATAGATATATATAGATACCAAAAAAGTAGATTTGTGTATATATTATAGAA	632
Db	2508	ATATATAATAAAAAATAAATTTAAATTTCAATAAAAACTAAATATTTCCAAAAATAATTATACC	2449
Qy	633	ATTTGGAAATTCATCATTTATCAGGATCTTAAGTACTTCCCTTAATTAATCAATGTCGGTTG	692
Db	2448	ATTTTACACTCCCATCAACACTATATATAAATCCCATTTCTACATCTTTTACAACTAAAA	2389
Qy	693	AAAAAGCTCAATGAATGTTTGAATTTTGGAAAGTTTATTAATTCGGATCTTTTTTTTTTT	752
Db	2388	AATTATCAATCTTTTCATTTCAACTATTTCTATAAATAATTTTAATAATCATATTTTAAT	2329
Qy	753	GTTTGTGTCCTCAACAATTTTTTTTATTTATTAACAATCAATCAACTTATCCTTACTACTAAA	812
Db	2328	TTCAATTTTACCATAAAAAATTTTCAAAAAATAAATAAATTTTAAACAAATTTTACATTTTA	2369
Qy	813	TCATTTCAATCTTTTGATACCAACAAATCATTTTCATATTCATTTTGTATCTTTAAGAAAA	872
Db	2268	AAAACTCTTTTACGTTATTAATTAATAAATAATTTATTTATATACCAAAAATTCATAACAA	2209
Qy	873	CATATTATACGAGTTACAAAATATTAATA-----GGATTGTGTTTTGAAGAAAA	921
Db	2208	CATTATTCAACAATAAACCAAAAAATAAATAAACCACATCCATTATATAATAATAATAA	2149
Qy	922	AAGTACAGTTTGAATCTCTTTTGTCAAAATAAATTAATGTGCTTTTAAATATTAATTTGACT	981
Db	2148	ATAAACAAATATATATATCATATATAATAAATAATTTTAACTTCAAAAAATAAAAA	2089
Qy	982	TATTCACATGATTACAGAATTAATCATCTACAAAACTTTTCCAAAGTTTATAATAAATAACA	1041
Db	2088	TTCTAAATACATACTACAACTATAAATCTCCTTAAAAACATTATATAATAATAATAAACCC	2029
Qy	1042	TTTCAAGACTATTAGTTCTTCTTAAATAATTTTCTAAAGTGATCAAGACTACCACTA	1101
Db	2028	AATCAAAAAAACAATTTATATATATTCATTTATATACGATACCTCGCACTTTACAAA	1969
Qy	1102	TAATTCAGAAAAAGTAGAAGTTGATTTCTTTTGTCAATAAATAATTTGACTTTAAATAATAG	1161
Db	1968	CAAAAAATCAATNTCGACTATAAAAAATTTAT--AAAAACGAAATACGAAAAATTTACTTA	1911
Qy	1162	TTTGGAAAGCATTGAACCTTGATTTAGAATTTAGATTAATGTAATTAATAAAAAAATTTCCAGTT	1221
Db	1910	TATAACAAACAAAATTTTCTATTTAAAAATAATAAAAAAATTTCTAAAAATAAATAATAATA	1851
Qy	1222	TATAATAATATACATTTTCAATGCTATATTCAGTTCTTCTTAAAAATTTTTCATAAAAAA	1281
Db	1850	TAATTTTCAACAATATAAATACTTAATA-----CAATAAATCTATACACTTAAAA	1798
Qy	1282	ACCTCAATATATAGATAAATTTTATTTGAATTAACATACCACTGTATAAACAGAAATTTGACA	1341
Db	1797	ATAATAAATTTTATATTAATAAATTTTATCAACACACAAAAAATAAAAAACGAAAA	1738
Qy	1342	AAAAAATAAAAAAATGAATGAAATGAAATGAAGCAAAAAATAAATCCAGAGATCTTATG	1401
Db	1737	AAAAAATAAAAAAATAAAAAAATAAAAAAATAAAAAAATAAAAAA-----1685	
Qy	1402	CAAAAAATATATGATATACACATTAACCATATTTGATATTTTTTAAAAATAAATAAAAAACA	1461
Db	1684	AAAAATAAATCTAACATACAAAAACCACTTCCCGGTAATCAACAATAAATAAATAACA	1626
Qy	1462	GAATAATA 1469	
Db	1625	AAAAATA 1618	

RESULT 12

RESULT 13
US-08-487-826B-13/c
Sequence 13, Application US/08487826B
Patent No. 5993827
GENERAL INFORMATION:
APPLICANT: Sim, Kim L.
APPLICANT: Chitnis, Chetan
APPLICANT: Miller, Louis H.
APPLICANT: Peterson, David S.
APPLICANT: Su, Xin-zhaun
APPLICANT: Wellens, Thomas E.
TITLE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING PROTEINS
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe Martens Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: California
COUNTRY: US
ZIP: 92560
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,826B
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Israelsen, Ned
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER: NH121.001CPI


```

; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 235-8550
; TELEFAX: (619) 235-0176
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19124 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; US-08-487-826B-13

Query Match      1.7%; Score 87.8; DB 2; Length 19124;
Best Local Similarity 44.8%; Pred. No. 5.6e-08;
Matches 577; Conservative 0; Mismatches 682; Indels 30; Gaps 5;

QY 211 GTTGTGTTAGCATGCTATGTTTAAACCTTAAAGAAATATGCTATGTTTAACTTAAAGAAATG 270
DB 7178 GTAGAAATAGAAATATTAACACCTTTTGTGAATGTATATCATATATGTAAGGTATATTTATG 7119

QY 271 TAGAGATACACATCAAAATATCGAGCATATCAAAACCGTATTCATAGACCGATGTGAGA 330
DB 7118 TATTACAA-CTATATAAATATTTGATATATATATATATATATATATATATATATATATATAT 7059

QY 331 ATCAATAGAGATATATGCTGATTTTAAATATTCGTATCTCCAAATCAATCACTTAGAA 390
DB 7058 ATAAATATCAATATATGTTATGTTTAAAGAAATATAT-TTATATATGTTATATAATATA 7000

QY 391 GATAATGCTATTTCTTATGCTACATAAATAATATATATATATATATATATATATATATATC 450
DB 6999 AT-ATTAGTTTATATATTTTAAAGAAATATATATATATATATATATATATATATATATATA 6940

QY 451 TTGTATATATGCTCTGACAAAGAAATTCGCCAGTCAAAACCACTGACTGAAATCAAACTATA 510
DB 6939 ATTAAATATCTTAACAAAGAAAGAAATATATATCAAGAAATATATATTTTATGTTATCTTT 6880

QY 511 GTCGGATTGAATCAAACTATAAGTCGGATGAGTATTAATTTCCATATATGTTCTATACCTT 570
DB 6879 TATTATCTATTTAAATATATATATATATATATATATATATATATATATATATATATATATAT 6820

QY 571 TACAAACCGGAAATACGATATATAGATACCAAGAAAGTAGATTTGTTGTTATATATATAGA 630
DB 6819 TATTAATAGCAAGAAAGAAATATACGAATATCAAAATATCAAAATATATATATATATATATAT 6760

QY 631 AGATTTGGAATTTATCATATATATACGATCAAGTATATATATATATATATATATATATATAT 690
DB 6759 GTTTATATATTTAATTTAATTAACATTAATATATATATATATATATATATATATATATAT 6700

QY 691 TGAAGAGCTCAATGATGTTTGAATTTGGAAGTTTATTAATTCGGATCTTTTATTTT 750
DB 6699 TATTATATATATATATATATATATATATATATATATATATATATATATATATATATATAT 6640

QY 751 TTGTTTCTGCTCCAAACATTTTATTTTATTTATACAAATATCAACTTATCTTACTACTA 810
DB 6639 CTATCTATATATATATATATATATATATATATATATATATATATATATATATATATATAT 6580

QY 811 -----AATCATTTTCATATCTTTTGATACCAACAAATCATTTTC 846
DB 6579 TTCTTTGTTATGTTGTTATATATATATATATATATATATATATATATATATATATATATAT 6520

QY 847 ATATTCATTTTGTATGTTTAAAGAAACATATTTTACAGTTTACAAATATATATATATATAG 906
DB 6519 ATATATATATATATATATATATATATATATATATATATATATATATATATATATATATAT 6460

QY 907 GTTGTCTTGAAGAAAGAAAGTACAGTGTGAATTTCTTTTGTCAATATATATATATATATAT 966
DB 6459 TAACAGGAAGAAATATATATATATATATATATATATATATATATATATATATATATATAT 6400

QY 967 AATATATATATGCTTTATGCAATGATATACAGAAATTAATCATCTACAAACATTTTCCAG 1026
DB 6399 TTGTTTGTGTTATTTTATGTTATGTTATGTTATGTTATGTTATGTTATGTTATGTTATGTT 6340

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RESULT 14

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US-10-204-708-23/c
; Sequence 23, Application US/10204708
; Patent No. 6677731
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204,708
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 23
; LENGTH: 11049
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-23

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Query Match      1.7%; Score 87.6; DB 4; Length 11049;
Best Local Similarity 45.3%; Pred. No. 5.3e-08;
Matches 498; Conservative 0; Mismatches 579; Indels 23; Gaps 4;

QY 399 AATTCCTTATGCTGCTACATAAATAATATATATATATATATATATATATATATATATATAT 458
DB 8426 ATTTCTTTTAAAAAATAATATATATATATATATATATATATATATATATATATATATATAT 8367

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RESULT 15
US-10-204-708-74/c
; Sequence 74, Application US/10204708
; Patent No. 6677731
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPERBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
; TITLE OF INVENTION: by Assessing DNA Methylation
; FILE REFERENCE: 5013.1012
; CURRENT APPLICATION NUMBER: US/10/204,708
; CURRENT FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/EP01/03971
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 74
; LENGTH: 5152
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-74

Query Match 1.7%; Score 86.6; DB 4; Length 5152;
Best Local Similarity 43.4%; Pred. No. 6.7e-08; Indels 19; Gaps 5;
Matches 659; Conservative 0; Mismatches 839;

Qy 160 AAAAATGTATTTTAGTTTATAAATATATCTACTAAAGAAAATTTTGGATTGTCGTGTTGTTAA 219
Db 2538 AAACAAATTTTCCGATATACCTCAACTATCCAAACCTATAACCTACTTTATTCTCC 2479

Qy 220 GCATATGATGTGTTAACTTTAAAAAATATGTAATGTAATCTTAAAAATGTAGGATAC 279
Db 2478 TATCTTTACTTAAAAATTTATAAACCCTTATTTTATAACCTATCTCCATTAAAAATAAATCTC 2419

Qy 280 ACATCAATACTCGAGATAATCAAAACCGTATTTCATAGACCGATGCAAAATCAAAATG 339
Db 2418 ATAAATCAAAAACATTTACTCTATTAAACAAATTTCTACACACATAAAATATATATAT 2359

Qy 340 ARGATAATGTGATTTTTTAAAAATATCGTATCTCCAAATCAATCACTTAGAAGATATGTA 399
Db 2358 TACAACH-----AAAATTCAAAAATTTATATCTCTAAAAAAAACTAAATAATAAAAAATAAT 2303

Qy 400 ATTCTTTATGCTGACATAATAAATATATATATATATATATATATATATATATATATAT 459
Db 2302 CCTAATCTCTTAAATTTTAAATTTTAACTTTTAAATATATATATATATATATATATAT 2243

Qy 460 TGTCTTGACAAAAAATTTGCCAGTCAAAAACCATGACTGAATCAAACTATAAGTCGGATTG 519
Db 2242 CAAAAATTAATAAAAAAATACCTAAATATATATCTTAAACAATACTTTAAAAATATAACCT 2183

Qy 520 AATCAAACTATAAGTCGGATGAGTATTAATTTCCATTAATGTTTCTATACTTTTACAAACCG 579
Db 2182 ATTCAATTTTAAATACCTTAAATCAACCAATTTCCACACAAATCACTTTTAACTATCAAAA 2123

Qy 580 GAAATAGATATTATAGATACCAAAAAAGTAGATTTGTGTATATTTATAGAGATTGGA 639
Db 2122 CACTTTTACCATAAATTTTATATATATATATATATATATATATATATATTTTACTTTATA 2063

Qy 640 ATTTCAATCATATCAGGATCTAAAGTACTTCCCTAAATTAATTAATGATGTCGGTGGAAAAAGC 699
Db 2062 TATATTAACTAAATAATTTTTTAAATACCTACTATAAATTTTAAACATAATATCTAAACACTAC 2003

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QY 1645 TCGCTCTTCCCTCCATAGATTCTGTTCTCTCTTCAATTTCTTCCGATCTCTCT 1704
 Db 121 TCGCTCTTCCCTCCATAGATTCTGTTCTCTCTTCAATTTCTTCCGATCTCTCT 180
 QY 1705 CGATTCTCTGACGCTCTTTCTCCGACGCTGTTTCTGCAACGCTTTTCGAAATGG 1764
 Db 181 CGATTCTCTGACGCTCTTTCTCCGACGCTGTTTCTGCAACGCTTTTCGAAATGG 240
 QY 1765 CGATTCTCTGACGCTCTTTCTCCGACGCTGTTTCTGCAACGCTTTTCGAAATGG 1824
 Db 241 CGATTCTCTGACGCTCTTTCTCCGACGCTGTTTCTGCAACGCTTTTCGAAATGG 300
 QY 1825 ATCTTGATAGCTTCGTCGACGGAATTCGATCGATCGATCTTCTTAAACGCTTCTCTCT 1884
 Db 301 ATCTTGATAGCTTCGTCGACGGAATTCGATCGATCGATCTTCTTAAACGCTTCTCTCT 360
 QY 1885 CTGCTTCGATTAATTTCTCTTCCGATGATGTTGGAGCTTCCGCGACGTTAGGGATC 1944
 Db 361 CTGCTTCGATTAATTTCTCTTCCGATGATGTTGGAGCTTCCGCGACGTTAGGGATC 420
 QY 1945 GGATTGATTCGCTGTTTAAACGATCGCTCAGGAAACAGCAATTTGGCCGAGATAATA 2004
 Db 421 GGATTGATTCGCTGTTTAAACGATCGCTCAGGAAACAGCAATTTGGCCGAGATAATA 480
 QY 2005 ACGTGCTGCGGATAATAACGCTGCTGGAAGAGCGCGGAGAGGAGGAGGAAACCGG 2064
 Db 481 ACGTGCTGCGGATAATAACGCTGCTGGAAGAGCGCGGAGAGGAGGAGGAAACCGG 540
 QY 2065 ATGCTAGTTAGCTATCGACCGTCTGTTCCAGCTCATCGAGGCGGAGAGAGTCCAC 2124
 Db 541 ATGCTAGTTAGCTATCGACCGTCTGTTCCAGCTCATCGAGGCGGAGAGAGTCCAC 600
 QY 2125 TTAGCTCCGACGCAATCTTCAACAG 2150
 Db 601 TTAGCTCCGACGCAATCTTCAACAG 626

RESULT 2

US-10-223-076-2
 ; Sequence 2, Application US/10223076
 ; Publication No. US20030074695A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Farese, Robert V
 ; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
 ; TITLE OF INVENTION: Uses Thereof
 ; FILE REFERENCE: UCAL-105CIP3
 ; CURRENT APPLICATION NUMBER: US/10/223,076
 ; PRIOR FILING DATE: 2001-10-29
 ; PRIOR APPLICATION NUMBER: 10/040,315
 ; PRIOR FILING DATE: 2001-10-29
 ; PRIOR APPLICATION NUMBER: 09/339,472
 ; PRIOR FILING DATE: 1999-06-23
 ; PRIOR APPLICATION NUMBER: 60/107,771
 ; PRIOR FILING DATE: 1998-11-09
 ; PRIOR APPLICATION NUMBER: PCT/US98/17883
 ; PRIOR FILING DATE: 1998-08-28
 ; PRIOR APPLICATION NUMBER: 09/103,754
 ; PRIOR FILING DATE: 1998-06-24
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 2
 ; LENGTH: 1904
 ; TYPE: DNA
 ; ORGANISM: Arabidopsis thaliana
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (139)....(1701)
 ; JS-10-223-076-2

Query Match 10.2%; Score 528; DB 15; Length 1904;
 Best Local Similarity 100.0%; Pred. No. 3.1e-80;

Matches 528; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1623 ATTCTTAGCTTCTCTTCAATCGCTCTTCCCTCCATAGATTCTGTTCTCTCT 1682
 Db 1 ATTCTTAGCTTCTCTTCAATCGCTCTTCCCTCCATAGATTCTGTTCTCTCTCT 60
 QY 1683 TCAATTTCTTCTGATGCTTCTGATTTCTCTGACGCTCTTTTCTCCGACGCTGTTT 1742
 Db 61 TCAATTTCTTCTGATGCTTCTGATTTCTCTGACGCTCTTTTCTCCGACGCTGTTT 120
 QY 1743 CGTCAACGCTTTTCGAAATCGGATTTTGGATTCTGCTGCTTACTACGTCGACGAG 1802
 Db 121 CGTCAACGCTTTTCGAAATCGGATTTTGGATTCTGCTGCTTACTACGTCGACGAG 180
 QY 1803 AACGGTGGCGGAGATTCGTCGATCTTTGATAGGCTTCTGACGGAATTCGAGATCGGAT 1862
 Db 181 AACGGTGGCGGAGATTCGTCGATCTTTGATAGGCTTCTGACGGAATTCGAGATCGGAT 240
 QY 1863 TCTTCTAACGACCTTCTCTCTGCTTCCGATTAATTTCTCTCGATGATGTTTGA 1922
 Db 241 TCTTCTAACGACCTTCTCTCTGCTTCCGATTAATTTCTCTCGATGATGTTTGA 300
 QY 1923 GCTCCCGCGGACGTTAGGATTCGATTCGCTGTTGTTAACGATGACGCTCAGGAAAC 1982
 Db 301 GCTCCCGCGGACGTTAGGATTCGATTCGCTGTTGTTAACGATGACGCTCAGGAAAC 360
 QY 1983 GCCAATTTGGCCGAGATAATAACGCTGGTGGCGGATAATAACGCTGGTGGAGGCGGC 2042
 Db 361 GCCAATTTGGCCGAGATAATAACGCTGGTGGCGGATAATAACGCTGGTGGAGGCGGC 420
 QY 2043 GGAGAGGAGAGAGGAAACGCGGATTCGATTCGCTGTTGTTAACGATGACGCTCAGGAAAC 2102
 Db 421 GGAGAGGAGAGGAAACGCGGATTCGATTCGCTGTTGTTAACGATGACGCTCAGGAAAC 480
 QY 2103 CGGAGGCGGAGAGAGAGTCCACTTAGCTCCGACGCAATCTTCAACAG 2150
 Db 481 CGGAGGCGGAGAGAGAGTCCACTTAGCTCCGACGCAATCTTCAACAG 528

RESULT 3

US-09-770-444-209/c
 ; Sequence 209, Application US/09770444
 ; Patent No. US20020023280A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gorlach, Jorn
 ; APPLICANT: An, Yong-Qiang
 ; APPLICANT: Hamilton, Carol M.
 ; APPLICANT: Price, Jennifer L.
 ; APPLICANT: Raines, Tracy M.
 ; APPLICANT: Yu, Yang
 ; APPLICANT: Rameaka, Joshua G.
 ; APPLICANT: Page, Amy
 ; APPLICANT: Matthew, Abraham V.
 ; APPLICANT: Ledford, Brooke L.
 ; APPLICANT: Woessner, Jeffrey P.
 ; APPLICANT: Haas, William David
 ; APPLICANT: Garcia, Carlos A.
 ; APPLICANT: Kricker, Maja
 ; APPLICANT: Slader, Ted
 ; APPLICANT: Davis, Keith R.
 ; APPLICANT: Allen, Keith
 ; APPLICANT: Hoffman, Neil
 ; APPLICANT: Hurban, Patrick
 ; TITLE OF INVENTION: Expressed Sequences of Arabidopsis
 ; TITLE OF INVENTION: thaliana
 ; FILE REFERENCE: 2027 (PARA-016PRV)
 ; CURRENT APPLICATION NUMBER: US/09/770,444
 ; CURRENT FILING DATE: 2001-01-26
 ; PRIOR APPLICATION NUMBER: 60/178,502
 ; PRIOR FILING DATE: 2000-01-27
 ; NUMBER OF SEQ ID NOS: 999
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 209

```

; LENGTH: 470
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-770-444-209

Query Match      5.3%; Score 277.4; DB 9; Length 470;
Best Local Similarity 99.6%; Pred. No. 1e-37;
Matches 278; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4675 GGTGGGAAACATGATCTTCTGGTTCATCTCTGCAATTTTCGGACAAACCGATGCTGCT 220
Db 279 GGTGGGAAACATGATCTTCTGGTTCATCTCTGCAATTTTCGGACAAACCGATGCTGCT 220

QY 4735 TCTTTATTACACGACCTCATGAACCGGAAGGATCGATGTCATGAACCACTGTTCCAA 4794
Db 219 TCTTTATTACACGACCTCATGAACCGGAAGGATCGATGTCATGAACCACTGTTCCAA 160

QY 4795 AAATGACTTCTTCAACATCATGCGCTCGTTGGATCTCCGTTGATGTTGTTGGTGGTTC 4854
Db 159 AAATGACTTCTTCAACATCATGCGCTCGTTGGATCTCCGTTGATGTTGTTGGTGGTTC 100

QY 4855 TCATCTAAACGACAAATAGTGTATTAACCATTTGAAGAGAGAAAGAAATTAGAGTTGT 4914
Db 99 TGATCTAAACGACAAATAGTGTATTAACCATTTGAAGAGAGAAAGAAATTAGAGTTGT 40

QY 4915 TSTACTGCAAAATTTTGGTAGACACGCGAACCCGT 4953
Db 39 TSTACTGCAAAATTTTGGTAGACACGCGAACCCGT 1

RESULT 4
US-10-312-841-1/c
; Sequence 1, Application US/10312841
; Publication No. US20030186277A1
; GENERAL INFORMATION:
; APPLICANT: Epigenomics AG
; TITLE OF INVENTION: D-agnose von bedeutenden genetischen Parametern innerhalb des MHC
; FILE REFERENCE: E01/208/WO
; CURRENT APPLICATION NUMBER: US/10/312,841
; CURRENT FILING DATE: 2002-2-20
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 1
; LENGTH: 3673778
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (3294164)
US-10-312-841-1

Query Match      3.1%; Score 161.6; DB 15; Length 3673778;
Best Local Similarity 47.1%; Pred. No. 4.6e-16;
Matches 689; Conservative 0; Mismatches 769; Indels 6; Gaps 6;

QY 35 TATTATTTCAAAGTTTAATATCTCTTTGTATACATTCATCTTCACATGTTGATTT 94
Db 1714596 TATTATCAAAAATCATATATATAAAATATATACATATAAAATATATATAAAATATATA 1714537

QY 95 GTGTGAACCCCAAGATTTTACTACATATAGGGGAGTGGTCACTTAAATAGCTATTGAT 154
Db 1714536 TAAAAATATATATAAATATATATAAAATATATAAATATATAAATATATAAATATAT 1714477

QY 155 GTCGAAATAATGATTTTATAGTTATTAATATA-CTAAGAGAAATTTTGTGTTCTGTT 213
Db 1714476 ATAAAAATATATAAAATATATAAAATATATATAAATATATAAATATATAAATATA 1714417

QY 214 GTTTAAGCATATGTTGTTAACTTAAATAAATATGTTGTTAACTTTAAATATGAG 273
Db 1714416 AAATATATATAAATATATAAATATATATAAATATATAAATATATAAATATATA 1714357

QY 274 GAGTACATCAAAATCTCGAGCATTAATCAAAACCGTATTTCATAGCCGATGTGAGATC 333

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Db 1714356 ATATATAAATATATATATAAATATATAAATATATAAATATATAAATATATAA 1714298
QY 334 AAATAGAGAGATAATGTGATTTTTTAAATATCTGTATCTCCAAATCAATCACTTGAAGAT 393
Db 1714297 ATATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAAAT 1714238
QY 394 AATGTAATCTTTATGTGCTACATAAATAATATATATATATATATATATATATATAT 452
Db 1714237 ATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATATAA 1714178
QY 453 GTATATATGCTTGCACAAAAATTTCCAGTCCAAACCAACGACGATCAAACTATATAGT 512
Db 1714177 ATATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAA 1714118
QY 513 CGGATTTGAATCAAACTATATAGTCGGATGAGTATTAATTTCCATTTCTATACITTTA 572
Db 1714117 TATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1714058
QY 573 CAACCGGAAATAGATATTTATAGATACCAAAAAAGTAGAT-TGTGTATATTTATTAGAA 631
Db 1714057 ATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713998
QY 632 GATTTTCGAATTTTCATCATTTATCAGGATCTAAAGTACTTCCCTTAATTAATCACTGCT 691
Db 1713997 TATATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713938
QY 692 GAAAAAGCTCAATGAATGTTTGAATTTGAAATTTGAAAGTTTATTAAATTCGGATCTTTT 751
Db 1713937 ATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713878
QY 752 TGTTCCTGTCGCGCAACATTTTATTTTATACAAATAATCAACTTATCTTACTACTAA 811
Db 1713877 AAATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAA 1713818
QY 812 ATCAATTTTCATCTTTGTATACCAACCAATCATTTTCATATTTCTATTTTGTGTTTAA 871
Db 1713817 TATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATATAA 1713758
QY 872 ACACATTTTACCAGTTTACAAATATTTATAAGGATTTGTTGTTTAGAAAAAAGTACA 931
Db 1713757 TATATATATAAATATATAAATATATAAATATATAAATATATAAATATATAA 1713698
QY 932 TCAATTTCTTTTGTCAATATATAAATTTGACTTTTAAATATATAAATTTGACTTTATG 991
Db 1713697 AATATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713638
QY 992 GATTACAGAAATTAATCATCTCAAAACTTTCCAAAGTTTATATAAATAATACATTTTCA 1051
Db 1713637 ATAAAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713579
QY 1052 TATTAGTTCTCTTAAAAATTTCTAAAAAGTGCATCAAGACTACCCATATATATTCAGAA 1111
Db 1713578 TATAAAATATATAAATATATAAATATATAAATATATAAATATATAAATATATA 1713519
QY 1112 AAAGTAGAAGTTGATTTCTTTTGTCAATAAATTAATTCGACTTAAATAGTTTGGAA 1171
Db 1713518 ATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713459
QY 1172 CATTCGAACTTGATTTAGAAATTTGATAATGTCATATAAAAAATTTCCAAAGTTTAA 1231
Db 1713458 TATAAATAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713399
QY 1232 ACATTTTCAAATGCTATAT-CAGTTCTCTTAAAAATTTTCCACTAAAAAACAACCTCAA 1290
Db 1713398 ATATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713339
QY 1291 TATAGAAATTAATTTTGAATTAACCATCCACTGTAAACAGAAATTTGCAAAAAA 1350
Db 1713338 TATAAATATATAAATATATAAATATATAAATATATAAATATATAAATATA 1713279
QY 1351 AAAAAATGAAATGAAGATGAAGAGCAAAAAATTAATCCACGAGGATCTTTATGCAAAA 1410

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[illegible][illegible]

; Sequence 192, Application US/09770791
; Patent No. US20020062014A1
; GENERAL INFORMATION:
; APPLICANT: Goriach, Jom
; APPLICANT: An, Yong-Qiang
; APPLICANT: Hamilton, Carol M.
; APPLICANT: Price, Jennifer L.
; APPLICANT: Raines, Tracy M.
; APPLICANT: Yu, Yang
; APPLICANT: Rameaka, Joshua G.
; APPLICANT: Page, Amy
; APPLICANT: Matthew, Abraham V.
; APPLICANT: Ledford, Brooke L.
; APPLICANT: Woessner, Jeffrey P.
; APPLICANT: Haas, William David
; APPLICANT: Garcia, Carlos A.
; APPLICANT: Kricker, Naja
; APPLICANT: Slader, Ted
; APPLICANT: Davis, Keith R.
; APPLICANT: Allen, Keith
; APPLICANT: Hoffman, Neil
; APPLICANT: Hurban, Patrick
; TITLE OF INVENTION: Expressed Sequences of Arabidopsis
; FILE OF INVENTION: thaliana
; FILE REFERENCE: 2029 (PARA-018PRV)
; CURRENT APPLICATION NUMBER: US/09/770,791
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: 60/178,480
; PRIOR FILING DATE: 2000-01-27
; NUMBER OF SEQ ID NOS: 999
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 192
; LENGTH: 380
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(380)
; OTHER INFORMATION: n = A,T,C or G

US-09-770-791-192

Query Match 2.7%; Score 141.8; DB 9; Length 380;
Best Local Similarity 95.4%; Pred. No. 1.4e-14;
Matches 146; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3453 TTACATTTGGCAGTATATAATCCCTATTGTCAGGAAGCTCAAGCATCCTTTGAAAGCG 3512
DB 80 TTATAATAGAACATATATAATCCCTATTGTCAGGAAGCTCAAGCATCCTTTGAAAGCG 139

QY 3513 ATCTTCTATATGCTATTGAAAGAGTGTGAAAGCTTTTCAGTTCCAAATTTATATGTGTGGC 3572
DB 140 ATCTTCTATATGCTATTGAAAGAGTGTGAAAGCTTTTCAGTTCCAAATTTATATGTGTGGC 199

QY 3573 TCTGCATGTTCTACTGCTTCTTCCACCTTTGGT 3605
DB 200 TCTGCATGTTCTACTGCTTCTTCCACCTTTGGT 232

RESULT 7
US-10-273-438-4
; Sequence 4, Application US/10273438
; Publication No. US20030072757A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V.
; APPLICANT: Cases, Sylvaine
; APPLICANT: Smith, Steven
; APPLICANT: Erickson, Sandra
; TITLE OF INVENTION: Diacylglycerol O-Acyltransferase
; FILE REFERENCE: UCAL-105CIP2
; CURRENT APPLICATION NUMBER: US/10/273,438
; CURRENT FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US/10/040,315
; PRIOR FILING DATE: 2001-10-29

; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 629
; TYPE: DNA
; ORGANISM: arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Each n residue at position 455, 464, 467, 475, 497, 500, 508,
; OTHER INFORMATION: 514, 519, 536, 543, 544, 576, 583, 584 and 597 can be either a, c,
US-10-273-438-4

Query Match 2.7%; Score 141.8; DB 15; Length 629;
Best Local Similarity 95.4%; Pred. No. 1.7e-14;
Matches 146; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3453 TTACATTTGGCAGTATATAATCCCTATTGTCAGGAAGCTCAAGCATCCTTTGAAAGCG 3512
DB 72 TTATAATAGAACATATATAATCCCTATTGTCAGGAAGCTCAAGCATCCTTTGAAAGCG 131

QY 3513 ATCTTCTATATGCTATTGAAAGAGTGTGAAAGCTTTTCAGTTCCAAATTTATATGTGTGGC 3572
DB 132 ATCTTCTATATGCTATTGAAAGAGTGTGAAAGCTTTTCAGTTCCAAATTTATATGTGTGGC 191

QY 3573 TCTGCATGTTCTACTGCTTCTTCCACCTTTGGT 3605
DB 192 TCTGCATGTTCTACTGCTTCTTCCACCTTTGGT 224

RESULT 8
US-10-223-076-1
; Sequence 1, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V.
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; FILE REFERENCE: UCAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 629
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 455, 464, 467, 475, 497, 500, 508, 514, 519, 536, 543, 544,
; LOCATION: 576, 583, 584, 597
; OTHER INFORMATION: n = A,T,C or G
US-10-223-076-1

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Query Match          2.7%  Score 141.8;  DB 15;  Length 629;
Best Local Similarity 95.4%;  Pred. No. 1.7e-14;
Matches 146;  Conservative 0;  Mismatches 7;  Indels 0;  Gaps 0;

QY 3453 TTACATTTGGCAGTATATAAATCCTATTGTCAGGAACCTCAAGCATCCTTTGAAAGGCG 3512
    |||
Db 72 TTATATAGAACAAATATAAATCCTATTGTCAGGAACCTCAAGCATCCTTTGAAAGGCG 131

QY 3513 ATCTTCTATATGCTATGAAGAGTGTGAAGCTTTCAGTTCCAAATTTATATGTGTGGC 3572
    |||
Db 132 ATCTTCTATATGCTATGAAGAGTGTGAAGCTTTCAGTTCCAAATTTATATGTGTGGC 191

QY 3573 TCTGCATGTTCTACTGCTTCTCCACCTTTGGT 3605
    |||
Db 192 TCTGCATGTTCTACTGCTTCTCCACCTTTGGT 224

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RESULT 9

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US-10-040-315A-4
; Sequence 4, Application US/10040315A
; Publication No. US20030167483A1
; GENERAL INFORMATION:

```

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; APPLICANT: Farese, Robert V.
; APPLICANT: Cases, Sylvaine
; APPLICANT: Smith, Steven
; APPLICANT: Erickson, Sandra
; TITLE OF INVENTION: Diacylglycerol O-Acyltransferase
; FILE REFERENCE: UCAL-105CIP2

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; CURRENT APPLICATION NUMBER: US/10/040,315A
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 3.0

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; SEQ ID NO 4

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; LENGTH: 629

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; TYPE: DNA

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; ORGANISM: arabidopsis thaliana

```

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; FEATURE:

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; NAME/KEY: misc_feature

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; LOCATION: (0)...(0)

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; OTHER INFORMATION: Each n residue at position 455, 464, 475, 497, 500, 508,
; 514, 519, 536, 543, 544, 576, 583, 584 and 597 can be either a, c
US-10-040-315A-4

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Query Match          2.7%  Score 141.8;  DB 15;  Length 629;
Best Local Similarity 95.4%;  Pred. No. 1.7e-14;
Matches 146;  Conservative 0;  Mismatches 7;  Indels 0;  Gaps 0;

QY 3453 TTACATTTGGCAGTATATAAATCCTATTGTCAGGAACCTCAAGCATCCTTTGAAAGGCG 3512
    |||
Db 72 TTATATAGAACAAATATAAATCCTATTGTCAGGAACCTCAAGCATCCTTTGAAAGGCG 131

QY 3513 ATCTTCTATATGCTATGAAGAGTGTGAAGCTTTCAGTTCCAAATTTATATGTGTGGC 3572
    |||
Db 132 ATCTTCTATATGCTATGAAGAGTGTGAAGCTTTCAGTTCCAAATTTATATGTGTGGC 191

QY 3573 TCTGCATGTTCTACTGCTTCTCCACCTTTGGT 3605
    |||
Db 192 TCTGCATGTTCTACTGCTTCTCCACCTTTGGT 224

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RESULT 10

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US/10/659

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; Sequence 4, Application US/10659800

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; Publication No. US20040078836A1

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; GENERAL INFORMATION:

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; APPLICANT: Farese, Robert V.
; APPLICANT: Cases, Sylvaine
; APPLICANT: Smith, Steven
; APPLICANT: Erickson, Sandra
; TITLE OF INVENTION: Diacylglycerol O-Acyltransferase
; FILE REFERENCE: UCAL-105CIP2CON2
; CURRENT APPLICATION NUMBER: US/10/659,800
; CURRENT FILING DATE: 2003-09-10

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; PRIOR APPLICATION NUMBER: 10/040,315

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```

; PRIOR FILING DATE: 2001-10-29

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; PRIOR APPLICATION NUMBER: 60/107,771

```

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; PRIOR FILING DATE: 1998-11-09

```

```

; PRIOR APPLICATION NUMBER: PCT/US98/17883

```

```

; PRIOR FILING DATE: 1998-08-28

```

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; PRIOR APPLICATION NUMBER: 09/103,754

```

```

; PRIOR FILING DATE: 1998-06-24

```

```

; PRIOR APPLICATION NUMBER: 09/339,472

```

```

; PRIOR FILING DATE: 1999-06-23

```

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; NUMBER OF SEQ ID NOS: 10

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; SOFTWARE: FastSeq for Windows Version 3.0

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; SEQ ID NO 4

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```

; LENGTH: 629

```

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; TYPE: DNA

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```

; ORGANISM: arabidopsis thaliana

```

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; FEATURE:

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; NAME/KEY: misc_feature

```

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; LOCATION: (0)...(0)

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; OTHER INFORMATION: Each n residue at position 455, 464, 475, 497, 500, 508, 514
US/10/659,800-4

```

Query Match

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Best Local Similarity 95.4%;  Pred. No. 1.7e-14;
Matches 146;  Conservative 0;  Mismatches 7;  Indels 0;  Gaps 0;

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QY 3453 TTACATTTGGCAGTATATAAATCCTATTGTCAGGAACCTCAAGCATCCTTTGAAAGGCG 3512
    |||
Db 72 TTATATAGAACAAATATAAATCCTATTGTCAGGAACCTCAAGCATCCTTTGAAAGGCG 131

QY 3513 ATCTTCTATATGCTATGAAGAGTGTGAAGCTTTCAGTTCCAAATTTATATGTGTGGC 3572
    |||
Db 132 ATCTTCTATATGCTATGAAGAGTGTGAAGCTTTCAGTTCCAAATTTATATGTGTGGC 191

QY 3573 TCTGCATGTTCTACTGCTTCTCCACCTTTGGT 3605
    |||
Db 192 TCTGCATGTTCTACTGCTTCTCCACCTTTGGT 224

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RESULT 11

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US-10-223-076-6

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; Sequence 6, Application US/10223076

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```

; Publication No. US20030074695A1

```

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; GENERAL INFORMATION:

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; APPLICANT: Farese, Robert V.

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; APPLICANT: Cases, Sylvaine

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```

; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and

```

```

; FILE REFERENCE: UCAL-105CIP3

```

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; CURRENT APPLICATION NUMBER: US/10/223,076

```

```

; CURRENT FILING DATE: 2001-10-29

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; PRIOR APPLICATION NUMBER: 10/040,315

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; PRIOR FILING DATE: 2001-10-29

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; PRIOR APPLICATION NUMBER: 09/339,472

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; PRIOR FILING DATE: 1999-06-23

```

```

; PRIOR APPLICATION NUMBER: 60/107,771

```

```

; PRIOR FILING DATE: 1998-11-09

```

```

; PRIOR APPLICATION NUMBER: PCT/US98/17883

```

```

; PRIOR FILING DATE: 1998-08-28

```

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; PRIOR APPLICATION NUMBER: 09/103,754

```

```

; PRIOR FILING DATE: 1998-06-24

```

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; NUMBER OF SEQ ID NOS: 17

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; SOFTWARE: FastSeq for Windows Version 4.0

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; SEQ ID NO 6

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; LENGTH: 1446

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RESULT 14
US-10-223-076-4
; Sequence 4, Application US/10223076
; Publication No. US20030074695A1
; GENERAL INFORMATION:
; APPLICANT: Farese, Robert V
; APPLICANT: Cases, Sylvaine
; TITLE OF INVENTION: Plant Diacylglycerol O-transferase and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: UCAL-105CIP3
; CURRENT APPLICATION NUMBER: US/10/223,076
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 10/040,315
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: 09/339,472
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/107,771
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/US98/17883
; PRIOR FILING DATE: 1998-08-28
; PRIOR APPLICATION NUMBER: 09/103,754
; PRIOR FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0

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; SOFTWARE: FastSEQ for Windows Version 4.0

Db 5553 TAAAAAATAATTCACACTCTAAAAAATACATATAAATAATTCCTTAACCAT 5494
 Qy 348 GTGATTTTTTAAATATCGTATCCGAAATCAATCACTTAGAGATATGTAATTCCTTA 407
 Db 5493 ACATAAAAATACATCTTCAAAACAAAAACAATACTTAACGTACAATATCATATATATA 5434
 Qy 408 TGTGCTACATATAATAAT 467
 Db 5433 TCTAATACATATAATATATACACATACATATATATATATATATATATATATATATATAT 5374
 Qy 468 CAAAAAATTCGCGCTCAAAACACCTGACTGAATCAAACTATAAGTCGGATTCGAATCAAC 527
 Db 5373 AATAAAAATTTAAATATAAT 5314
 Qy 528 TTTAAGTCGGATGATTAATTTTCCATATATATATATATATATATATATATATATATATAT 587
 Db 5313 AATTAATTCAAAAATTTTATCTTAAATAATTAACATAAAAAATACGCAAAAAAATCTTATT 5254
 Qy 588 ATATTATAGATACCAAAAAAGTAGATTTTGTATATATATATATATATATATATATATAT 647
 Db 5253 TTTCTCCCTTATTTACATTAATTTTTTTTACTTAAACAAAAACCAAAAAAATTCCTTAAT 5194
 Qy 648 ATTATCAGGATCTAAAGTACTTCCTTAATTAATCAATCGTGTGAAAAAGCTCAATGAA 707
 Db 5193 CTAAATTAATTTAATTAACAACCTCTAATCAAAACAAATATATATATATATATATATAT 5134
 Qy 708 TGTTGAAATTTGGAAGTTTATTAATTCGGATCTTTTTTTTGTGTTGTTGTTGTTGTTGTT 767
 Db 5133 TAAAAATCAACAATTAATAAAAAATATTTATACCTTACCTTTTATCTAATTAATTCCTTAA 5074
 Qy 768 CATTTTATTTTATTAACAATAATCACTTATCTCTA-CTACTAAATCATTTCTATCTTT 826
 Db 5073 AATAAATCTCTTAAAAAAATTAATAAATAATCTCTAATCTTTTAAATCTTAAATAATATC 5014
 Qy 827 TGATPACCAACAAATCAITTCATATTTCTATTTTGTATTTTAAAGAAAAACACTATTTACCAGT 886
 Db 5013 TAAATAAATAAATTTCTTCATATCTTACTCTTCAAAATTAATAAATAATTAATAATTAACCTTT 4954
 Qy 887 TACAAATATATTAAGGATTTGTTTGAATAAAAAAGTACAAGTGAATTCCTTTTGTGTC 946
 Db 4953 AAAAAATATAACAAATCTTATCCCAATACCAAAAAAATACTACATATACTTAAACAA 4894
 Qy 947 AATATATAATTTGACTTTTAAATATAATTTGACTTATTTGACATGATTAACAGATTAAT 1006
 Db 4893 ACAACTTAAACACCTATCAATCAATAAACCCTTAAATAAATTTTAAATAAATAAATA 4834
 Qy 1007 CATCTACAAACTTTCCAGTTTATA---ATAATACATTTTCAAGGACTATTAGTCTTCTC 1063
 Db 4833 AAAAAAATAAATAAATTTTAAATACATACTATACTTCAAAACATTAATAAATA 4774
 Qy 1064 TTAATAATTTCTTAAAGTGTATCAAGACTACCATATATATTTTCGAAAAAGTAGAGTT 1123
 Db 4773 TATATAATCTTTTACTTAAATATAAAGCTTTTAAATAACAACTTAAATAAACAACAA 4714
 Qy 1124 GATTTCTTTTGTCAATAATTAATTTGACTTAAATAGTTTGGAAAGCCATTGAACTTGA 1183
 Db 4713 AACTCGAAAAATTAACATACTTAAATTTAAATAATTAATTAATAAATAATTAACCAAAATTA 4654
 Qy 1184 TTATAGAAATTTGATAATGTACATAAAAAAATTTCCAAAGTTTATAATAATTAATTTTCAAA 1243
 Db 4653 AAAAAATTAACCAAAATAAACAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA 4597
 Qy 1244 TGCTATATCAGTTCTTCTTAAATAATTTTCACTAAAAAACHACTCAAAATATAGAAATTAAT 1303
 Db 4596 AAAAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA 4537
 Qy 1304 TATGATATACATACCAACTGTAAACAGATTTTGACAAAAAATAAATAAATAAATAAATA 1363
 Db 4536 AAAAAATTAATTAATTTTATTCAAATTTTAAATTTTCTTTTATCTTATCTTATCTTATCT 4477
 Qy 1364 AAGATGAAGACAAAAATAATCACCAGGATCTTATGCAAAAAAATATATGAATACACA 1423

Db 4476 TTAATTAATTTCAATTTTAAATACCATATATATTTTCAACCAAAATTAATAATTAACAA 4417
 Qy 1424 ATAAACCATATTTGTATTTTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 1465
 Db 4416 AAATTTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 4375

Search completed: May 5, 2004, 20:19:50
 Job time : 2003.47 secs

11

ALIGNMENTS

RESULT 1
 US-09-326-203A-1
 ; Sequence 1, Application US/09326203A
 ; Patent No. 6444876
 ; GENERAL INFORMATION:
 ; APPLICANT: Lassner, Mike
 ; APPLICANT: Ruezinsky, Diane
 ; TITLE OF INVENTION: Acyl-CoA:Cholesterol Acyltransferase Related Nucleic
 ; TITLE OF INVENTION: Acid Sequences
 ; FILE REFERENCE: 17045700/WO
 ; CURRENT APPLICATION NUMBER: US/09/326,203A
 ; CURRENT FILING DATE: 1999-06-04
 ; PRIOR APPLICATION NUMBER: 60/088,143
 ; PRIOR FILING DATE: 1998-06-05
 ; PRIOR APPLICATION NUMBER: 60/108,389
 ; PRIOR FILING DATE: 1998-11-12
 ; NUMBER OF SEQ ID NOS: 46
 ; SOFTWARE: Patent In Ver. 2.1
 ; SEQ ID NO 1
 ; LENGTH: 1942
 ; TYPE: DNA
 ; ORGANISM: Arabidopsis thaliana
 US-09-326-203A-1

Alignment Scores:
 Pred. No.: 4,71e-296 Length: 1942
 Score: 2771.00 Matches: 520
 Percent Similarity: 100.00% Conservative: 0
 Best Local Similarity: 100.00% Mismatches: 0
 Query Match: 100.00% Indels: 0
 DB: 4 Gaps: 0

US-09-623-514A-2 (1-520) x US-09-326-203A-1 (1-1942)

OY

1 MetAlaIleLeuAspSerAlaGlyValThrValThrGluAsnGlyGlyGluPhe 20
 |||||

Db 237 ATGGCGATTTTGGATTCTGCTGGGTTACTACGGTCACGGAGAACGGTGGCGGAGAGTTC 296
Qy 21 ValAspLeuAspArgLeuArgArgLysSerArgSerAspSerSerAsnGlyLeuLeu 40
Db 297 GTCGATCTCTGATAGAGCTTCGTGCGAGGAATCAGATCGGATCTCTTAACGAGACTTCTT 356
Qy 41 LeuSerGlySerAspAsnAsnSerProSerAspAspValGlyAlaProAlaAspValArg 60
Db 357 CTCCTGCTGGTCCGATATATCTCTCTCGATGATGTTGGAGCTCCCGCGACGTTAGG 416
Qy 61 AspArgIleAspSerValAsnAspAspAlaGlnGlyThrAlaAsnLeuAlaGlyAsp 80
Db 417 GATCGGATTCGATTCGGTTGTTAAACGATGACGCTCAGGGAACAGCCAAATTTGGCCGAGAT 476
Qy 81 AsnAsnGlyGlyGlyAspAsnAsnGlyGlyGlyArgGlyGlyGlyGlyGlyGlyGlyGly 100
Db 477 AATAACGGTGGTGGCGATATATAACGGTGGTGGAGAGCGCGGAGAGAGGAGAGGAGAAC 536
Qy 101 AlaAspAlaThrPheThrThrArgProSerValProAlaHisArgAlaArgGluSer 120
Db 537 GCCGATGCTACGTTTACGATATCGACCGCTCGGTTCCAGCTCATTCGGAGGCGAGAGAGT 596
Qy 121 ProLeuSerSerAspAlaIlePheLysGlnSerHisAlaGlyLeuPheAsnLeuCysVal 140
Db 597 CCACCTAGCTCCGACGCAATCTTCAACACAGAGCCATGCCGGATTAATCAACCTCTGCTA 656
Qy 141 ValValLeuIleAlaValAsnSerArgLeuIleIleGluAsnLeuMetLysThrGlyTrp 160
Db 657 GTAGTTCTTTATTTGCTGTAACAGTAGACTCATCATCGAAATCTTATGAAGTAGTGGTGG 716
Qy 161 LeuIleAtqThrAspPheThrPheSerSerArgSerLeuArgAspTrpProLeuPheMet 180
Db 717 TTGATCAGAACCGATTTCTGGTTTATGTTCAAGATCGCTGGCAGATTGGCCGCTTTTCATG 776
Qy 181 CysCysIleSerLeuSerIlePheProLeuAlaIlePheThrValGluLysLeuValLeu 200
Db 777 TGTGTGTATATCCCTTTCGATCTCTTCTTGGCTGCTTACGGTGGAGAAATGGTACTT 836
Qy 201 GlnLysThrIleSerGluProValValIlePheLeuHisIleIleIleThrMetThrGlu 220
Db 837 CAGAAATACATATCAGAACCTGTTGTCATCTTCTTCATATATATATATATATATATAT 896
Qy 221 ValLeuThrProValThrValThrLeuArgCysAspSerAlaPheLeuSerGlyValThr 240
Db 897 GTTTTGTATCCAGTTTACGCTCAACCTTAAGGTGTGATCTGCTTTTATACAGGTGTCACT 956
Qy 241 LeuMetLeuLeuThrCysIleValThrLeuLysLeuValSerThrAlaHisThrSerThr 260
Db 957 TTGATGCTCTCTCACTTGCATTTGTGGCTAAGTTGGTTCTTATGCTCATACTAGCTAT 1016
Qy 261 AspIleArgSerLeuAlaAsnAlaIleAspLysAlaAsnProGluValSerThrThrVal 280
Db 1017 GACATAGATCCCTAGCCATGACGCTGATAGGCAATATAGGCAATCTCTTACGATCTCT 1076
Qy 281 SerLeuLysSerLeuAlaThrPheMetValAlaProThrLeuCysThrGlnProSerThr 300
Db 1077 AGCTTGAAGAGCTTGGCATATTTATGCTGGCTCCACATCTGTTATCAGCCAGTTAT 1136
Qy 301 ProArgSerAlaCysIleArgLysGlyTrpValAlaArgGlnPheAlaLysLeuValIle 320
Db 1137 CCACGTTCTGCATGTATACGGAAGGGTGGGTGGCTCGCTCAATTTGCAAAACTGGTCTATA 1196
Qy 321 PheThrGlyPheMetGlyPheIleIleGluGlnThrIleAsnProIleValArgAsnSer 340
Db 1197 TTCACCGGATTCATGGGATTTATATAGAACATATATATATATATATATATATATATAT 1256
Qy 341 LysHisProLeuLysGlyAspLeuLeuThrAlaIleGluArgValLeuLysLeuSerVal 360
Db 1257 AAGCATCTCTTTGAAGGCGATCTCTCTATATGCTATTTGAAGAGGTGTGAAGCTTTTCAGT 1316
Qy 361 ProAsnLeuThrValThrLeuCysMetPheThrCysPhePheHisLeuThrLeuAsnIle 380
Db 1317 CCMAATTTATATATGTTGGCTCTGCAATGTTCTACTGCTTCTTCCACCTTTGGTTAAACATA 1376

Qy 381 LeuAlaGluLeuLeuCysPheGlyAspArgGluPheThrIleAspTrpTrpAsnAlaLys 400
Db 1377 TTGGCAGAGCTTCTCTGCTTCGGGATCGTGAATTTCTACAAAGATTGGTGGAAATGCAAAA 1436
Qy 401 SerValGlyAspThrTrpArgMetTrpAsnMetProValHisLysTrpMetValArgHis 420
Db 1437 AGTGTGGAGATTACTCGAGAAATGTGGAATATGCTGCTTCTATAAATGGATGGTTCGACAT 1496
Qy 421 IleThrPheProCysLeuArgSerIleIleProLysThrLeuAlaIleIleAlaPhe 440
Db 1497 ATATACCTTCCGCTGCTTCGGCAGCAGATACCAAGACACTCGCCATATCATTTGCTTTC 1556
Qy 441 LeuValSerAlaValPheHisGluLeuCysIleAlaValProCysArgLeuPheLysLeu 460
Db 1557 CTAGTCTCTGCAAGTCTTTTCATGAGCTATGCATCGCAGTTCTGCTCTCTTCAAGCTA 1616
Qy 461 TrpAlaPheLeuGlyIleMetPheGlnValProLeuValPheIleThrAsnThrLeuGln 480
Db 1617 TGGGCTTTTCTTTGGGATTTATGTTTCAGGTGCTTTGGTCTTTCATCACAACACTATCTACAG 1676
Qy 481 GluArgPheGlySerThrValGlyAsnMetIlePheThrPheIlePheCysIlePheGly 500
Db 1677 GAAAGGTTTGGCTCAACCGTGGGGAACATGATCTTCTGGTTCACTCTCTGCAATTTTCGGA 1736
Qy 501 GlnProMetCysValLeuLeuThrThrHisAspLeuMetAsnArgLysGlySerMetSer 520
Db 1737 CAACCGATGTGTGCTTCTTTTATTACCACCGACCTGATGAACCGAAGAGATCGATGTCA 1796